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UNEMPLOYMENT IN THE LEARNED PROFESSIONS

AN INTERNATIONAL STUDY OF
OCCUPATIONAL AND EDUCATIONAL
PLANNING

BY

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FOREWORD

THIS book represents a first attempt to deal in a comprehensive way and on an international scale with a problem which, though essentially a problem of the younger generation, is of paramount importance for the cultural, social, and political evolution of society. The plan for the book and the inquiries which led up to it originated with International Student Service, which itself had arisen out of the needs of the post-War student generations in Europe and elsewhere. During the first years after the World War International Student Service endeavoured to meet the physical wants of the institutions of higher learning and their students. Through relief and the establishment of self-help organizations it helped many institutions and tens of thousands of students to overcome the disastrous consequences of the war and its aftermath. Later on it shared in their discussions of the more fundamental problems besetting the modern universities by publications such as *The University in a Changing World* (Oxford University Press, 1932). In 1932 it set out on a study of one of the most difficult issues confronting the institutions of higher learning and their students—the problem of the overcrowding of the universities and the growing unemployment of their graduates. Thanks to the generous support of the Carnegie Corporation of New York, given through the International Institute of Teachers College, Columbia University, this study developed into a world-wide survey of which the more important results are summarized in the present volume.

Scores of university teachers, educational administrators, public men and women, secretaries of appointment boards and of professional organizations, students and others in some thirty different countries collaborated in this survey. To them we owe most of the information on which our findings and conclusions are based. Only those who know how defective educational and professional statistics are in most countries, how reluctant educational institutions or professional organizations sometimes are to part with information, the divulging of which they consider contrary to their interests—only they will realize how much we owe to these collaborators. Most of them have given their help voluntarily, and it is our first duty to thank them and all those who have aided us with advice and criticism.

Notwithstanding the large measure of co-operation which we have found, it is evident that our exposition of the facts and their analysis can in no sense do full justice to our problem. The very magnitude of the issues imposed certain limitations of which more will be said later on. Owing to altogether inadequate information or in order to avoid tedious repetition certain countries had to be omitted from the survey. On the other hand the wide ramifications of the problem made it inevitable that certain aspects should be treated in a very cursory way. We are aware of the dangers which this implies: any selection depends on a personal point of view which is always assailable. But we do not apologize for what is in the nature of all learning. In the inescapable perspectivity of all knowledge lies the motive power for ever new effort and research. We are not afraid of criticism but we dread inertia. If this publication stimulates discussion, if it leads to further searching, it will have attained its purpose.

One thing must not be forgotten. Behind the dry figures of our statistical tables, behind the dispassionate analysis of cause and effect, there lies the misery of a whole generation. It has been ever present with us as this book was being prepared: the utter despair of thousands and thousands of parents who saved and slaved a lifetime to give their children an education, only to see them in the end unemployed, very often broken in body and in spirit; the impotent wrath and the slow demoralization of promising young men and women, loaded with degrees and certificates, to whom society denies the opportunity to put to any use their gifts and their knowledge. To them this book is dedicated.

W. M. K.

GENEVA,
October 15th, 1936.

ACKNOWLEDGEMENTS

I CANNOT let this book go to the press without expressing again my abiding gratitude to all those who have made it possible. My thanks go out above all to Dr. Frederic P. Keppel, President of the Carnegie Corporation of New York, and to Professor Paul Monroe, Director of the International Institute of Teachers College, Columbia University, New York, whose belief in the undertaking when it was but a project meant both encouragement in a difficult task and concrete help towards its accomplishment. It goes out to Dr. Tissington Tatlow (London), under whose chairmanship International Student Service decided to sponsor the project, and to Dr. Max Schneebeil (Geneva), its present General Secretary. Without their continued interest and assistance this book might never have seen the light of day. We also owe a special debt of gratitude to Professor I. L. Kandel of New York, Professor A. M. Carr-Saunders of Liverpool and Oxford, Professor Seth Wakeman of Smith College, Dr. A. Z. Reed of the Carnegie Endowment for the Advancement of Teaching in New York, and to the officials of the International Labour Office, particularly M. Fernand Maurette, M. H. Fuss, and Mr. D. C. Tait, whose advice and criticism have been invaluable.

It is impossible to mention by name all those who have helped us with reports and information on the situation in their respective countries. Yet we feel impelled to express our public thanks at least to our main contributors: Dr. L. Acsay (Budapest), Dr. Iwao Ayusawa of the Tokyo Branch of the International Labour Office, Miss Marie Butts, General Secretary of the International Bureau of Education (Geneva), Mr. John Beresford, Secretary of the University Grants Committee (London), Dr. Hans Bosshardt of the Schweizerischer Schulrat (Zürich), Mr. Edward Bradby, Associate General Secretary of International Student Service, Dr. Brüscheiler, Director of the Swiss Federal Office of Statistics (Berne), Professor Vincenzo Castrilli of the International Institute of Intellectual Co-operation (Paris), Professor Honorato de Castro (Madrid), Dr. and Mrs. S. K. Datta (Lahore), Professor Josef Dobretsberger, former Minister of Social Affairs in Austria, Professor Aage Friis (Copenhagen), Dr. Jan Hejman of the Ministry of Public Instruction in

Czechoslovakia (Prague), Dr. Aladár Haász of the Ministry of Education in Hungary (Budapest), Sir Philip Hartog (England), Dr. Philip Idenburg, Director of the Netherlands Bureau of Educational Statistics (The Hague), Mr. Harry Johanssen (Lund), Mr. Thomas A. Joynt, Registrar of the University of Edinburgh, Professor Mitsuaki Kakehi (Tokyo), Miss Tatiana Kirkova (Sofia), M. Constantin Kiritzesco, Director of Higher Education (Bucharest), Dr. Istvan Lajti of the Institute of Intellectual Co-operation (Paris), Professor G. H. Livens (Cardiff), Actuary H. Palmström (Oslo), M. Alfred Rosier, Director of the Bureau Universitaire de Statistique (Paris), Sir Tej Bahadur Sapru (Allahabad), M. Anskar Schnore (Riga), Dr. Stanko Skerlj (Belgrade), Professor Giorgio del Vecchio and his collaborator Miss Paola Arcari (Rome), M. Jean Willems, Director of the Fondation Universitaire (Brussels), Professor Sven Wicksell (Lund).

In the foreword I dedicated this book to the younger generation. It deals with their problems. Yet it is their book also in another sense. Throughout the years of preparation and while it was being written a group of young people, mostly recent graduates, gave freely of their time to help the writer in the collection of the necessary data, and to keep up to date what in the end became a formidable collection of material. Their enthusiasm and their assistance, given unstintingly, were both a tremendous help and a continuous source of inspiration. I can only mention those who have spent months on end in such unselfish service: Miss Kerstin Berggren (Lund), Miss Nancy Challoner (Geneva and London), Miss Margot Erkelens (Holland and Geneva), Mrs. Thomas Hale Ham (New York), Miss Gerda Kaufmann and Miss Bertha Woodall (both of London and Geneva), and finally Mr. Peter Rhodes (New York and Oxford).

No words would be adequate to thank my wife for her correction and revision of my work.

W. M. K.

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INTRODUCTION

SETTING THE SCENE

FOR years it has been held and emphatically stated that the institutions of higher learning in many countries are overcrowded, both in relation to available educational facilities and to the demand for the professional services of the graduates of these institutions. Some thousands of newspaper clippings as well as several hundred books and pamphlets on this subject have been collected in the course of the inquiry. They give vivid testimony to the acuteness of the problem in more than one country, though they give little accurate information as to its extent.

In studying this material one cannot help feeling that the world is still far from a real understanding and appreciation of all or even the major issues involved. A few attempts have been made to tackle the problem at its roots. They will be given special consideration as our argument develops. These attempts, however, do not detract from the general impression that educational and state authorities have been powerless in their efforts to grapple with the essential factors of the situation. Country after country, faced with the demands of university graduates who have never been able to find work and who feel thwarted in all their hopes, resorts to measures which are inadequate, to say the least, and which at their best can only bring a temporary alleviation.

SCOPE AND LIMITATIONS

It is at this point that the importance of an international inquiry and of an exchange of experiences from country to country becomes obvious. Not only is such an international study bound to stimulate national inquiries of a more detailed nature—as has been proved by our inquiry—but it can offer most valuable suggestions for local efforts and can draw the attention of investigators to certain aspects of the problem which arise most clearly only in the light of international comparison, and which for that reason are often overlooked. Above all it can help to avoid misdirection of efforts which terminate in serious loss of time and wasteful expenditure.

Consequently, the kind of international report here contemplated will best serve its purpose:

(a) by demonstrating the most adequate methods of approaching

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the problem and by pointing out the weaknesses of current approaches;

- (b) by elaborating what is typical in local and national situations;
- (c) by pointing out certain generally valid causes such as the bearing of the technological development of a given period upon education, and the results of the maladjustment of education to these technological developments.

In doing this the report should help to overcome the departmentalization of knowledge in education and the social sciences which has led to many failures in the field of educational reform, as often these reforms are carried through without a true appreciation of relevant economic, technological, and social facts.

On the other hand, it cannot be our task to produce a kind of educational and occupational guide to which anxious parents may turn to discover what careers their children should choose. Our report will demonstrate that any such effort on an international scale is doomed to failure in view of the complexity of the problems to be faced in each individual country and the great differences prevailing from country to country. While it is possible to show certain generally valid causes for the existing 'overcrowding' both within the institutions of higher learning and in the professions, it is also evident that concrete professional prospects of interest to parents and students are influenced by specific situations, by the sociological, political, and economic factors of a given land and period, which make it imperative that professional prospects should be investigated separately for each country. The task of an international inquiry must be to guide and stimulate such investigations, not to replace them.

Our international inquiry is *social* in character. It is concerned with social phenomena. We are not dealing with the individual and his or her prospects; it is society which is in the centre of the study and its observations. More concretely speaking, we attempt to ascertain to what extent the real or alleged overcrowding of the institutions of higher learning can be traced to the social, economic, and political factors in the evolution of present-day society; furthermore, to what extent the unemployment or 'under-employment' in the learned professions is due to the overcrowding of the institutions of higher learning. Finally, the question will have to be answered whether education itself can offer a solution to our problem; whether, from being a mere function of society, educa-

tion can help to change and give new direction to social and economic trends. This question will be deprecated by certain schools of economists who are unable to see the difference between the sound economic theories of Karl Marx and his nineteenth-century philosophy. It may also be considered as irrelevant by certain educators whose one and only interest is the individual, who forget that the 'free and unhampered' development of the child may not always fit it for a useful and happy life in society. Yet we hope to prove that by introducing new concepts into education, by re-organizing educational systems and practices in order to adapt them more fully to the needs of society, a great deal might be done to stem the rising flood of poorly qualified students and to achieve a better distribution over the various professions and vocations of young people preparing themselves for life.

DEFINITION OF TERMS

The discussion of international subjects in any field is greatly impeded by lack of a common terminology. Even where one and the same word is used in different languages it may have very varied meanings. The terms *student*, *institution of higher learning*, and *profession* have given rise to heated discussions in more than one international conference—futile discussions, on the whole, as they advance but little our understanding of the very pressing problems with which we are here concerned. The differences, for instance, between colleges and universities in the United States and European institutions of higher learning will never be satisfactorily met by attempting definitions which will do justice to both. The most fundamental of the differences which have a real bearing upon the problem in hand are at the same time the most subtle and most difficult to define.

To avoid an arid discussion, suffice it to say that we are using, for the purpose of this study, the definitions of the terms *student* and *institutions of higher learning* which were adopted by the Conference on the Overcrowding of the Universities held in September 1933 at the International Labour Office in Geneva. They are wide enough to include institutions and types of students who have to be considered in the unemployment situation in the learned professions, and at the same time definite enough to exclude certain schools and institutions which are decidedly of secondary grade, although they aspire to college rank.

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These definitions read as follows :

'For the purpose of international university statistics the term *student* should be confined to any person admitted to attendance in an institution of higher learning. To be included in this category are those establishments in which the instruction serves the double purpose of promoting the advancement of science and providing professional training.

'As a guide to classification, a standard may be found for countries where such examinations exist, in the requirement for passing successfully examinations based upon studies of a secondary grade, such as the *baccalauréat*, matriculation examinations, or their equivalent. It is recommended in any case that reference be made to any lists of establishments of higher learning drawn up by the competent authorities in each country.'¹

These definitions have been adopted by Professor Vincenzo Castrilli of the University of Bari, the statistical expert of the International Institute of Intellectual Co-operation, whose remarkable studies have greatly advanced the cause of a better co-ordination of university statistics from country to country.² Castrilli, having made the definition his own, points out that wherever possible students should, for statistical and other purposes, be classed according to existing categories, i.e. full-time students, part-time students, or *étudiants ordinaires*, *auditeurs*, *élèves libres*, &c. This is particularly important for those countries where only full-time students or students belonging to equivalent categories are admitted to the examinations that give access to the learned professions. Unfortunately official publications do not always bring out this distinction, which constitutes an important source of error in the evaluation of statistical data.

No adequate definition can be given for the term *profession*. Professor A. M. Carr-Saunders and P. A. Wilson in their standard work, *The Professions*,³ have very rightly not even tried to give a definition, but have proceeded by analysing the various professional organizations, beginning with those of law and medicine, with a view to examining and evaluating all that is characteristic of professionalism. Even at the end of their admirable treatise their

¹ *Rapport de la Conférence d'Experts sur le Surpeuplement des Universités*, published by International Student Service, Genève, 1933, pp. 43-4.

² See Report C.116, 1935, of the I.I.C.I., *La Coordination des Statistiques Universitaires Nationales*, pp. 23 ff.

³ A. M. Carr-Saunders and P. A. Wilson, *The Professions*, Oxford, 1933.

respect for the living reality of the values which make the true 'professional' man or woman only allows them to give certain approximations to the term 'profession'. 'We have found that the application of an intellectual technique to the ordinary business of life, acquired as the result of prolonged and specialized training, is the chief distinguishing characteristic of the professions.'¹ Or, again: '... professions can only be said to exist where the practitioners come together in free association.'²

Yet, for the purpose of this report *and only for this purpose*, we may be allowed to beg a controversial question by an initial arbitrary definition of terms. Since the subject of our inquiry is the relationship between the overcrowding of the institutions of higher learning and the unemployment in the professions, or—more correctly speaking—in the learned professions, we can confine ourselves to a consideration of those callings which require or tend to require of their members that they obtain their training at an institution of higher learning. The other professions need only be considered in so far as they serve to absorb the surplus of graduates unable to find a place in the 'learned' professions.

THE USE OF STATISTICS

Even if it were possible, it could not be our task to give complete statistics of university enrolments throughout the world or of the number of unemployed and under-employed in the various learned professions of the various countries. Such 'completeness' would only detract from the arguments we are endeavouring to put forward. As a matter of fact, available national statistics are in most cases so inadequate or unreliable that any attempt to compile complete 'world student statistics' or unemployment statistics for intellectual workers must for the time being remain abortive. They are indeed so deficient that they are hardly adequate even for the limited purpose of this study.

One important shortcoming of national statistics was pointed out when we drew attention to the fact that official publications very often omit to record student enrolments according to the existing categories of students. This is only one of many shortcomings. Many statistical reports omit to give the number of first-year students; even more seem to consider it unnecessary to record

¹ Loc. cit., p. 490.

² Ibid., p. 495.

the number of students who have left the institutions of higher learning after having taken a degree. Indications as to the average duration of study are only given spasmodically. For these and other reasons it is very often difficult, if not impossible, to determine with any measure of correctness either for the present or for the years to come the volume of supply of academically trained people.

The situation becomes altogether disastrous when we turn to professional statistics. Actual unemployment statistics are practically non-existent even for those categories of professional workers who ordinarily follow their profession, not as free-lance practitioners, but as state or private employees, and of whom it should therefore be possible to ascertain when they are unemployed. No statistics are available of the *sous-classes*, i.e. those who have had to accept temporary or permanent employment of a kind which they might have obtained without ever going to a university or even to a secondary school. Most statistics give global figures as to the number of free-lance practitioners, for instance physicians with a practice of their own, but they fail to give indications as to their age, the extent to which they are occupied, the average mortality in the professions, &c. Thus it becomes even more difficult to determine the demand for professional workers than it is to define their supply.

It is evident in the light of these deficiencies that many questions arising in the course of our inquiry must remain unanswered until better statistics can be provided. This book will serve a useful purpose if it achieves nothing else than to bring home the need for better educational and professional statistics. Fortunately, the realization of that need is growing. Mention has been made of the work of Professor Castrilli, who, in co-operation with the Directors of Higher Studies of several European countries and through the channels of the International Institute of Intellectual Co-operation, has been working ceaselessly for a number of years to bring about a better co-ordination of national and international statistics and to extend their scope. That this can be done even in these years of government economies has been shown by such national efforts as those carried on by A. Rosier of the Bureau Universitaire de Statistique within the Ministry of Education in Paris, by Dr. Philip Idenburg of the Department of Educational Statistics at The Hague, or by the former Volkswirtschaftliche Zentralstelle für

Hochschulstudium und Akademisches Berufswesen at Kiel. How much can be achieved is best demonstrated by a national survey in Sweden undertaken with the help of the Government by Professor Sven Wicksell and Tor Jerneman, the results of which have recently been published.¹ Similar surveys have been made or are in preparation in Holland,² Finland, Rumania, in various provinces of India, and in other countries.

From the recognition that better statistics are needed it is a far cry to the kind of idolatry of figures which seems to obsess some students of our subject. Statistics exercise a strange fascination over them. Educators who ought to know better seem to forget altogether that in the field of intellectual endeavour, as in education and the efforts for social change, what can be interpreted qualitatively is often more important than that which can be pressed into quantitative measurement. They complain that official statistics give more information about the number of cattle or the output of coal than they offer about the situation in the learned professions or the achievements of the universities. In this they are undoubtedly right, and we share their concern. But they seem to forget that cattle and coal can be standardized, can easily be described in terms of uniform units, while such attempt at standardization in the field of education or of professional services meets with considerable difficulties. True, the number of students might and ought to be known at any time, it should be possible to determine approximately at least the extent of demand and supply on the market for intellectual labour—but one graduate is not like any other graduate, one professional man cannot always be replaced by another professional man even if their training has been identical. It is significant that even where there are definite indications of an overcrowding of certain professions, such as medicine, it is sometimes practically impossible to find suitable candidates for vacant places. Numerous also are the complaints of employers, official and private, that the kind of graduates who are turned out are unfit for any positions which may be available. Such complaints should not be taken lightly. They show that a quantitative

¹ *Betänkande med undersökningar och förslag i anledning av tillströmningen till de intellektuella yrkena*; Statens offentliga utredningar 1935: 52, Stockholm, 1935.

² *De Toekomst der Academisch Gegradeerden*, Rapport van de Commissie ter Bestudeering van de toenemende Bevolking van Universiteiten en Hooge Scholen en de Werkgelegenheid voor Academisch Gevormden, Groningen, 1936.

analysis may lead to altogether erroneous results unless it is put to qualitative tests.

For these reasons we shall avoid pressing precise figures too hard, even where there is no doubt about their scientific correctness. We share the view expressed in the *Annual Review of Legal Education in the United States*,¹ that 'social phenomena do not readily lend themselves to the system of exact measurements which is appropriate to physical science. Statistical tables are to scientific truth what scaffolding is to a building; if they sometimes have to be erected in order that the truth may be ascertained, they need also to be torn down in order that the truth may be revealed.'

THREE YEARS OF PREPARATION

A good deal of work has been accomplished since the early days of October 1932 when, under the title *The Overcrowding of the Universities; Causes, Consequences, Solutions; an International Inquiry*, the first questionnaire was sent out from Geneva to some sixty university professors and college administrators in thirty-four countries. It was originally intended to obtain only sufficient information for the publication of a small report to serve as a basis for discussions at the 1933 Annual Conference of International Student Service. It was furthermore planned to publish separately some of the best replies produced in answer to the inquiry.

This plan was changed when early in 1933 the International Institute of Teachers College, Columbia University, with the assistance of the Carnegie Corporation of New York, decided to help finance the inquiry on a somewhat larger scale than originally conceived. It now became possible to secure a few paid collaborators where voluntary helpers could not be found. Plans were made at the same time to call a conference of experts to elicit an exchange of information and experience, and thus to gain a fuller comprehension of the criteria to be considered.

This conference was held from September 21-3, 1933, at the International Labour Office. It was chaired by M. Fernand Maurette, Deputy Director of the International Labour Office, and Professor Giorgio del Vecchio, Dean of the Law Faculty of the University of Rome. Thirty-two experts from nineteen different

¹ Alfred Z. Reed, *Review of Legal Education in the United States and Canada for the year 1933*, The Carnegie Foundation for the Advancement of Teaching, New York, 1933, p. 60.

countries and various representatives of international organizations, such as the Confédération Internationale des Travailleurs Intellectuels, took part in the conference.

The results were not altogether satisfactory. The reports which had been submitted and which were largely based on the original questionnaire, sent out in 1932, revealed that while there was a great deal of public discussion about the alleged overcrowding of the universities, very few reliable data were actually available. Thus the conference, instead of grappling with the problem in its essential factors, spent a disproportionate amount of time discussing terms and definitions, some of the results of which we have already mentioned. On the other hand, there can be little doubt that the conference did a great deal to stimulate public interest and new researches on a national basis.

After the conference the method of sending out general questionnaires to the various countries was abandoned. An effort was made to supplement the available information by direct inquiries to statistical offices, appointment boards, professional organizations, and other agencies. This method had the advantage that it not only elicited a fuller measure of general information, but helped to bring out a great many new factors which had remained unknown even to the public of the countries furnishing the information.

During the period from October 1933 to March 1934 the writer of this report was enabled to visit the United States and to establish direct contacts with the Office of Education in Washington, university and college authorities, and officers of the various educational and professional agencies. In the absence of any *central* organization in the United States studying the problem of higher education in relation to social and economic facts, this was the best way to advance the inquiry there.

To complete the account of the fact-finding procedure, mention must be made of two further gatherings. The first was of representatives of international student organizations, held in Geneva on April 10-11, 1935, under the auspices of the Institute of Intellectual Co-operation. Most of this meeting was devoted to the study of the overcrowding of the universities and the unemployment in the professions. A preliminary report on the findings of our inquiry was one of the main documents discussed and had a determining influence on the final recommendations.¹ A second

¹ See *Coopération Intellectuelle*, I.I.C.I., No. 55-6, juillet-août 1935, pp. 397 ff.

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conference was convened by International Student Service, in which the Ministries of Education and representatives of the universities of Bulgaria, Romania, and Yugoslavia participated. It was held from December 8-12, 1935, in Belgrade (Yugoslavia), and not only produced a great deal of relevant and hitherto unknown data about the situation in the Balkan countries but signified an important advance in the efforts to reduce pressure upon the universities and the professions in those countries.

In spite of these efforts there are still very serious gaps in the information on which this study is based. They will be too obvious to the reader to require specific mention at this point. It may be necessary, however, to explain why certain countries have not been considered at all in the report. There is a first group composed of some of the British Dominions and of the smaller countries in Europe, where the situation in the universities and in the professions is covered in all its aspects by an analysis of the situation elsewhere. To include all these countries would have meant tedious repetition. It is more serious that neither Latin America nor China have been given the place they deserve. As regards Latin America, the omission is due to an almost complete absence of reliable data. We do not affirm that such data may not exist, but in view of our restricted resources it was not possible to set up the machinery by which they might have been secured. The same is more or less true of China. At the same time we doubt very much whether even with adequate machinery it would have been possible to get a clear idea of the present status of higher education in China, in view of the grave disturbances which have upset the administration of the country during the last ten years.

The most serious omission is that of the U.S.S.R. Originally it was intended to make a special study of the situation in that country, where the number of full-time students has increased from 125,000 in 1914 to over half a million in 1934. The increase in student enrolments was particularly marked between the years 1931 and 1933, when the number of students rose from 18 to 30 per 10,000 inhabitants. In spite of this extraordinary growth in student population Soviet Russia is one of the few countries in the world which is not suffering from the unemployment of graduates. Such facts demand attention. On the other hand, the whole economic and social structure of U.S.S.R. has undergone such changes that only a very careful analysis, necessitating a prolonged

visit to Soviet Russia, would have yielded results free from errors of perspective and understanding, and therefore of constructive value for international comparison. Here, again, lack of financial resources and of time have prevented us, and rather than produce for the sake of completeness a few superficial observations, we have deemed it advisable to reserve an investigation of the situation in U.S.S.R. for a later occasion.

As the facts accumulated the question arose how the final report should be arranged. It would, of course, have been easiest to arrange the material by countries, as was originally intended. This, however, would have made it more difficult to perceive any general pattern and to follow the elucidation of certain trends which are essential. For these reasons the grouping of the report by subject-matter was chosen. This made it possible to emphasize from the beginning the import of certain phenomena, to study them from different angles, and to test their influence on the situation in the various countries.

Some of the conclusions reached in this study run counter to many of the ideas behind such measures as have been taken to combat the overcrowding of the universities and the unemployment in the professions. It may be felt that the writer of this volume has gone too far; in order to protect his various collaborators it must therefore be clearly understood that he alone can be held responsible for the conclusions reached.

PART I THE RUSH FOR HIGHER EDUCATION

I

INCREASE AND SHIFTS IN STUDENT ENROLMENT

THE twentieth century may some day, in retrospect, be called the century of higher education. Numerous are the countries in which the population of the institutions of higher learning has trebled since the beginning of the century; in some cases it has even reached four or five times the extent it had in 1900.

This is one of the few points on which even the existing statistics, notwithstanding their faults and shortcomings, are conclusive. True, the student census is carried out at different periods of the scholastic year and in different ways in the various countries, but seen over a period of years this is of no significance. Even the differences in the structure of the various institutions of higher learning with their different types of students, which in practically all other respects causes considerable difficulties to the statistician, is of small importance, as, in order to demonstrate the increase, we only need to compare enrolment figures within the same country. The only real difficulty is that most countries have at one time or another during the last thirty years changed their methods of ascertaining and recording student enrolments. This is particularly true of the United States, where as recently as in 1932 the recording of student enrolment underwent considerable changes. Furthermore, the United States as well as Great Britain have only gradually reached the point where existing official statistics cover—with few exceptions—the entire student field. Thus the earlier figures given for these countries are apt to be incomplete, and the increases recorded may sometimes exaggerate the actual position. This source of error obviously grows in importance the farther back one goes. It is therefore proposed to use as a starting-point in the following tables the last few years before the World War, and more particularly the year 1913-14 as the last normal year before the War. Reference to earlier periods will only be made when it is essential to show certain long-range developments and in so far as available figures can be considered reliable.

The extent of the increase in student population is shown in

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Table I. It gives the total student enrolment in the universities and colleges for the years 1913, 1925, 1930, 1932, 1934 for

TABLE I. *Total enrolment of Students in institutions of higher learning in 1913, 1925, 1930, 1932, 1934, and increase in percentages of 1934 over 1913 (1913 = 100)*

	1913	1925	1930	1932	1934	Increase 1934 over 1913 (1913 = 100)
Australia	4,576	8,285	9,483			207.2
Austria	18,129	19,852		23,954	19,297	106.5
Belgium ²	8,532	9,848	10,845	11,456	11,038	129.4
Bulgaria	1,822 ³	5,905	8,037	8,709	.	477.9
Canada		47,059	51,250	59,252	.	125.9
Czechoslovakia	13,477	26,167	28,892	31,793	30,142	223.7
Denmark ⁴	2,707	4,193	5,021	5,363	5,405	199.7
Estonia	1,841 ⁵	4,988	3,913	3,343	3,366	182.8
France	41,044 ⁶	58,507	73,601	82,655	87,152	212.3
Germany	76,847	89,481	132,090	129,606	106,764	138.9
Great Britain ⁷	27,728 ⁸	41,606	47,826	50,755 ⁹	50,638	182.6
Greece	3,345	11,726	.	8,409		251.4
Holland	5,568	9,438	11,489	12,725	13,683	245.7
Hungary	18,238	15,229	16,229	16,002	15,659	85.8
India	36,284 ¹⁰	93,741 ¹¹	100,349	105,238		290.0
Italy	28,026	44,906	44,460	47,723	51,003	181.9
Japan ¹²	9,527	50,727	67,555	69,985	70,162 ¹³	736.5
Latvia	2,088	7,194	8,577	8,584	8,066	386.3
Norway	2,294	4,154	4,622	5,164	5,387	234.9
Poland	15,203 ¹⁴	37,125	48,155	51,770	49,599 ¹⁵	326.2
Romania	5,930	29,930	40,300 ¹⁵	39,027	39,670	668.9
Spain	19,858	29,366	.	35,992		181.2
Sweden	6,363	8,989		11,302		177.6
Switzerland ¹⁶	9,486	8,105	8,501	9,536	10,545	111.2
Turkey	2,914 ¹⁷	3,930	4,443	5,403	7,020	240.9
U.S.A.	332,696 ⁶	822,859 ¹⁸	971,584	989,757		297.5
Yugoslavia	8,400 ¹⁹	10,673	14,539	14,174	15,267	181.7

(1) For Bulgaria, Canada, Greece, India, Spain, Sweden, U.S.A. the increase is only given up to 1932; for Australia up to 1930 (2) Universities only, including technical institutes and technical courses within universities, but excluding Écoles Supérieures de Commerce and Écoles Techniques Supérieures, for which complete figures could not be obtained (3) 1910, the figures given for Bulgaria include the students in all institutions of higher learning The figures for the State University in Sofia only are as follows—1913 1,397, 1925 2,493; 1930 4,572, 1932 5,371, 1933 6,143, 1934 6,335, 1935 5,466 (4) Universities only (5) 1920 (6) 1910 (7) Full-time university students only (8) 1910-11. (9) 1932-3 (10) 1912 (11) 1927. (12) Universities only. (13) 1933 (14) 1910-11, universities and colleges within the territory of Poland formerly belonging to Russia (15) Approximate figure (16) Universities and Polytechnic, Swiss and foreign students together, the figures for Swiss students only are 1913 4,892, 1925 6,164, 1932 6,973, 1934 7,783. These figures prove that there is a heavier increase in Swiss students (1913 = 100, 1934 = 159.1) than there is in total enrolments (1913 = 100; 1934 = 111.2) The number of foreign students influence in a similar way, though to a smaller extent, the total results in a number of countries, particularly in France, with 16,277 foreign students in 1932, in Germany with 6,558; in Austria with 8,267, &c. (17) 1923-4 (18) 1926 (19) 1920-1, approximate figure.

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countries representing—within the limits explained in the introduction—various stages in cultural and technical development and every type of higher educational system. 1925 has been chosen as the first year after the War which can be taken as 'normal', as by then the inflation of enrolment figures by students returned from the War had ceased.

Table I, in spite of certain gaps, shows an impressive growth of student enrolments throughout the world. Whether in Europe or in the Far East, in the United States of America or in Australia, there is an ever-increasing flow of young people seeking the privileges of higher education. At the same time marked differences can be discerned in the extent of the increase from country to country. Without attempting a premature analysis, it is possible on the basis of these figures to arrive at a grouping of countries which is not without interest.

The increase is of course particularly noticeable in those countries which have only developed their higher education on modern lines during the last thirty years. Japan heads the list with an increase from 1913 to 1933 of 636.5 per cent. The stupendous development of this country in the industrial, commercial, and military fields finds its worthy counterpart in the development of its institutions of higher learning. The increase appears not quite so large, but still most striking, if the universities and the so-called *special schools* and *special technical schools* of Japan are considered together. These latter types of school have not been included in Table I because their students cannot be clearly defined in terms of western institutions. They are preparatory to universities, or they are teaching subjects which in Europe and America are partly taught in higher technical schools or in technical colleges of university rank (Technische Hochschulen, &c.). On the whole there is a tendency to assimilate a section of this class to the universities. Thus many of them gained university rank as the result of the expansionist education policy of the Hara Cabinet, the first Cabinet after the War. This incidentally explains the sudden rise in university enrolments during the first years after the War. Universities, special schools, and special technical schools counted 206,856 students in 1931 as against 57,378 in 1913—an increase of 262.3 per cent.

In India, also, the growth of the student population is remarkable, particularly in view of the high percentage of illiteracy in

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the country, which reduces the percentage of population from which students are drawn. The illiteracy figure is 90·6 per cent., so that out of a total population of 352,936,000 only 37,546,000 are able to read and write.¹ Thus there is at present one student to every 357 *literate* in India.

In this same category of countries which have only completed their system of higher education during recent decades, and at the same time in the category of those which gained their independence or enlarged their borders owing to the Peace Treaties, belong countries like Romania, Greece, Poland, and Latvia. The largest increase is to be recorded in Romania (1913-34: 568·9 per cent.) and the smallest in Poland (1911-33: 226·2 per cent.), i.e. all these countries have at least trebled their student enrolments. Yugoslavia, Turkey, Esthonia, countries in a similar position, have doubled or nearly doubled their enrolments since the first years after the War. Czechoslovakia, which even before the War possessed highly developed institutions of higher learning in what is to-day her own territory, only records an increase from 1913 to 1934 of 123·7 per cent.

Another group of states is to be noticed which took no part in the War and which experienced a great, if temporary, increase in the national income, spread over all classes in the community. The number of students increased from 1913 to 1934:

in Holland	by 145·7 per cent.
in Norway	" 134·9 " "
in Denmark	" 99·7 " "
in Spain	" 81·2 " "
in Sweden	" 77·6 " "
in Switzerland (Swiss students only)	" 59·1 " "

The value of this latter grouping is very doubtful. The very fact that, according to the figures of Table I, France and Italy come

¹ The illiteracy figures for British India are not comparable with those of other countries. The literacy test applied in India requires that people should be able 'to write a short letter and to read the reply to it'. This sets a comparatively high standard of literacy. If a similar test were applied to other countries, which for instance only require that people should be able to sign their name, there can be no doubt that illiteracy figures in other parts of the world would be considerably higher than those usually recorded. In other words the particular ways of ascertaining literacy in India lead to more reliable results than those obtained elsewhere. (Cf. James F. Abel and Norman J. Bond, *Illiteracy in the Several Countries of the World*, U.S. Department of the Interior, Bureau of Education, Bulletin 1929, No. 4, pp. 3 and 46.) ² 1913-34.

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within the same group indicates that the temporary prosperity of the neutral countries is not necessarily a decisive factor in student enrolments. This is also shown by the very considerable difference in the degree of increase existing between these countries. It all goes to show that in Central and Western Europe so many forces are at work, not one of which is necessarily important enough to determine the development of student enrolments in a decisive way over a prolonged period, that the pure enrolment figures given up to now do not yield any conclusive information. It will therefore be necessary to make a much closer analysis of the situation in some of these countries as this study develops.

The figures given for Austria and Hungary, taken at their face value, are misleading. They would indicate that student enrolments in Austria have only increased by 6.5 per cent., while in Hungary they have even increased by 14.2 per cent. It must not be forgotten that the pre-War figures, though given for the same institutions of higher learning, relate to a very much larger territory and to a considerably larger population. Actually there was one student to well over 1,000 inhabitants in Austria before the War and one student to 1,174 in Hungary. The same universities are to-day producing one student to 344 inhabitants in Austria and one to 554 in Hungary.

RATIO OF STUDENTS TO POPULATION

The method of comparing the ratio of students to population as applied in the previous paragraph to Austria and Hungary before and after the War has two advantages. On the one hand it helps to eliminate the effects of territorial changes on the comparability of our figures; on the other hand, it shows to what extent the increase in enrolments can be explained by a corresponding increase in population.

Table II indicates the ratio of students to population in 1913 and 1934, or the nearest years for which census figures and figures for student enrolments are available. It has not been possible to obtain altogether comparable figures, i.e. it has been necessary to compare very often the student enrolments of one year with the census figures of another year, for instance the student enrolments of 1913 with the census figures for 1910. This obviously causes a certain margin of error, which is, however, not such as to influence greatly the marked trends revealed in the table.

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TABLE II. *Frequency of students in total population, in order of frequency in 1934, for the years 1913 and 1934*

Country	Number of inhabitants per student		Increase in frequency 1913-34 (1913 = 100)
	in 1934	in 1913	
India . . .	3,354 (1932)	8,684 (1912)	258.9
Japan . . .	919 (1933)	5,787	629.7
Great Britain . . .	885	1,470	166.5
Italy . . .	808	1,270	157.2
Greece . . .	760 (1932)	1,438	189.2
Belgium . . .	734	895	121.9
Denmark . . .	657	1,045	159.1
Spain . . .	655 (1932)	1,022	156.0
Poland . . .	648 (1933)	827 (1925)	127.6
Germany . . .	604	872	144.4
Holland . . .	579	1,116	192.8
Hungary . . .	554	1,174	211.6
Sweden . . .	543 (1932)	886	163.2
Norway . . .	522	1,074	205.7
Czechoslovakia . . .	489	544 (1925)	111.3
France . . .	480	969	201.9
Romania . . .	454	1,311	288.8
Switzerland . . .	387 ¹	476	123.0
Austria . . .	344	1,000 (approx.)	290.7 (approx.)
Estonia . . .	332	536 (1920)	161.5
Latvia . . .	236	726 (1920)	307.7
U.S.A. . .	125 (1932)	290 (1910)	232.0

(1) Including Swiss and foreign students, rectified figure for Swiss only: 511.

A scrutiny of this table leads to two conclusions. It proves that the increase in student enrolments cannot be explained by a corresponding increase in population. In Japan the number of university students has grown six times as quickly as the population.¹ Looking only at the European scene, and taking only those countries for which pre-War population figures exist, we find that there are no less than five countries (Austria, Romania, Hungary, Norway, and France) in which the students increase at twice the rate of increase in population. Even in Belgium, where the pressure upon the universities has been less marked than in other European countries, the rate of increase of students is 21.9 per cent. higher than that of population.²

¹ If the *special schools* and *special technical schools* are included, the increase in student enrolments is still three times as large as the increase in population.

² It has been pointed out that the figures for Belgium include only universities and technical institutes within the universities. As the few available figures

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As a second conclusion—and this conclusion follows as an obvious result from the first—it is to be noted that higher education has become accessible to a much larger section of the population. It is a fact in which all those will rejoice who believe in equality of opportunity in higher education. The doors of the institutions of higher learning have been opened wide to admit, as will be shown later on, students belonging to strata of society which before the War were excluded from higher education. To go to the university is no longer the exclusive privilege of a select few. On the other hand, one is tempted to conclude that it is just this sudden expansion of higher education which has been responsible for the unemployment in the learned professions. Here, again, it must be reserved for a later section of this study to investigate to what extent this assumption is correct.

THE UNITED STATES: A SPECIAL CASE

In our remarks about the figures reproduced so far, no mention has been made of the United States. The situation there is unique, and requires a special section to do it justice.

The United States not only holds the record in total student enrolments, but it also has a higher proportion of students to population than any other country. In 1932, out of every 125 inhabitants of the United States one student went to university or college. There is nothing in Europe to parallel this formidable phenomenon. A highly developed country like Switzerland extended the privileges of a higher education only to one out of 511 inhabitants in 1934. The difference is even more striking if we compare the number of persons of college age with the number of those who are actually in an institution of higher learning. Charles H. Judd estimates that one out of every seven persons of college age was actually frequenting an American college in 1930.¹ According to the introduction to the *Statistics of Higher Education, 1931-2*, only about one-tenth of the young people of college age were in college.² This difference in estimate is insignificant when for higher commercial schools and independent higher technical schools indicate that their student enrolments have grown even more rapidly than those of the universities, it is obvious that the disproportion in increase of population and of students is in reality higher than 21·9 per cent.

¹ Charles H. Judd, 'Education', in *Recent Social Trends in the United States*, New York and London, 1933, vol. i, chap. vii, p. 329.

² *Biennial Survey of Education*, Office of Education Bulletin (1933), No. 2, chap. iii, p. 4.

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one realizes that the corresponding Swiss figures for 1930 are 1:29 for the male population of Switzerland and 1:238 for the female population.¹

In the light of these figures one is tempted to conclude that in the matter of higher education Europe is as backward as she is in the use of automobiles or refrigerators. Many casual observers both in the United States and in Europe have fallen to this temptation. And numerous are the Europeans, seconded by a few Americans, who in defence of the European system declare that America is only making up in quantity what she lacks in quality. Both these assumptions are unjustified.

- For all further purposes it is essential to realize that the American figures are not comparable with European figures, or, more correctly speaking, that they can only serve as a basis for comparison if correctly understood and interpreted. The statistics of higher education in the United States include a very large proportion of 'students' who, according to European standards, are not of college or university rank. The first two years in an American college of the liberal type correspond much more nearly to the last two years of a secondary school in Europe. There is little or no specialization and no attempt at independent research. The students are given a general education and even the outward forms of teaching and learning resemble those of secondary schools in Europe. Compulsory attendance, a rigid system of credits, which in spite of notable exceptions is still very general, study under close supervision and control are all elements which indicate the secondary-school character of a large section of American college life. In the words of the *Biennial Survey of Education*:² 'Students in most European countries have completed the equivalent of our freshman college year—and in many cases the sophomore year also—before entering the universities.'

Liberal estimated, the number of students above sophomore year in degree-giving institutions in the United States, including graduate students beyond the B.A. (calculated by the Office of Education at 45 per cent. of the total), is 450,000.³ This means about one student for every 275 of the total population, a figure which, though still above most of the European figures, brings us

¹ *Schweizerische Hochschulstatistik, 1890-1935*, Beiträge zur Schweizerischen Statistik, Heft 3, Berne, 1935, p. 17.

² Loc. cit., p. 4.

³ Loc. cit., figures of 1932.

much nearer to an understanding of the real extent to which the American people participate in higher education.

The distinction made between the first two years and the last years of college life in the United States is obviously somewhat arbitrary. However, it can be estimated that the number of students in certain colleges which even in their last years are not much more than glorified secondary schools are cancelled out by the students in those colleges which even in their first years come very near to the European idea of an institution of higher learning.

An estimate arrived at by different methods leads to very much the same results. According to the statistics given in the *Biennial Survey* for 1932 there were approximately 360,000 students in colleges and universities following graduate or professional courses. To these have to be added plus/minus 65,000 students in teachers' colleges following graduate courses. This means that roughly 425,000 students were engaged in specialized studies. Not all of them can be considered as students in the European sense, as much of the professional training given them is definitely of a secondary grade. However, it must not be forgotten that the European statistics of higher education also include certain schools whose courses are becoming increasingly 'vocalized' and in which the emphasis on individual research is much less marked than it was twenty years ago. The figure of 425,000 'students' excludes, on the other hand, all the students of the last two years in college who—even in so far as their work may be definitely of university rank—are not following professional courses. Their number is probably considerably larger than that of the students following professional courses of a purely secondary type. We are therefore justified in assuming that the number of 'students of institutions of higher learning' is indeed in the neighbourhood of 450,000—the figure previously arrived at by different ways.

In reply to the critics who maintain that all or most of the so-called higher education in America is below European standards, it can only be said that this is a question of evaluation in which personal points of view play a considerable role. Our own inclination is to rank the American students more or less on the same level as the European students and thus to assert the full comparability of the American student figures, as rectified, with similar European figures. In doing this we are guided by two considerations. First of all, no European observer who is not blinded by prejudice can deny

that the quality of work done in many of the American institutions of higher learning compares favourably with the work accomplished in many of the European institutions. Certain medical and law schools equal the best medical and law faculties in Europe. Sometimes we cannot even help feeling that they are better. Apart from everything else this can be explained by the very liberal financial support these schools have received in recent years in the United States, support which has been lacking in Europe. On the other hand it has already been suggested that the vocational element is gaining ground in European institutions. Only a small proportion of the present-day European students correspond to the idea of the disinterested scholar for whom the advance of knowledge and the discovery of truth is the sole, or even the main, consideration. The idea still survives, but the reality lags badly behind it. We have to get used to the fact that professional and vocational courses are being more and more recognized as an integral part of higher education.

Notwithstanding the rectification and evaluation of the picture offered by American university statistics, the fact remains that the people of the United States have a larger share in higher education than the people of Europe. It is a fact of which Americans are rightly proud. They have gone a long way in attaining the ideal of equality of opportunity in education. To them it means the partial realization of the American dream.

In the next section, when we shall attempt to analyse increases and shifts in enrolments by faculties, it will become obvious that much of the increase in student enrolments in the States is due to the large number who go to college in order to prepare themselves for teaching careers. Thus not only are American colleges educating proportionately larger numbers than any other country, but they are producing more and more graduates who will devote themselves to raising still further the educational level. To the average European America is the country of automobiles, of a mechanized civilization; to the sympathetic observer it is also the country of mass education on an unprecedented scale; a mass education in which, however, the qualitative element is by no means neglected.

INCREASE BY FACULTIES

To break up total enrolment figures with a view to giving an idea of the changes which have taken place in the number of

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students frequenting this or that faculty is an almost impossible task. In a majority of countries the clear distinction between the classical university faculties of theology, law, medicine, and philosophy has been obliterated. Science courses, which before the War were frequently within the faculty of philosophy or arts—some countries still record science students as belonging to the faculty of philosophy—have now in many cases been grouped in a new department or faculty. Students of dentistry are classed with students of medicine or separately. Economics and social sciences, formerly often taught in law faculties, have made themselves independent. Teachers who formerly were educated in teachers' training institutes classed as secondary schools are now being educated in teachers' colleges, in arts colleges and universities, in normal schools of undefined ranking, in pedagogical academies, and in all kinds of other institutions. The available statistics seldom make it clear whether they prepare for a career as primary or as secondary school teachers. New courses of all kinds such as home economics or library science have been added. Yet the subjects are not new, for university-trained librarians existed before special courses for them were invented, and subjects such as nutrition were taught in universities long before any one thought of a degree in home economics. From a statistical point of view it simply means that students are now counted under headings different from those under which they were counted ten or twenty years ago. Finally, scores of altogether new courses have sprung into existence—particularly in the United States—of a highly vocational, though not necessarily practical, character, and their students clutter up official and private statistics.

The higher technical institutes have by no means been spared confusion. In view of our rapid technical development it is evident that the classical courses of engineering (civil, mechanical, electrical, &c.) have had to be divided up, which makes comparisons with previous years very difficult. Here, too, new courses such as aviation have had to be added. Finally, technical courses, particularly chemistry and physics, have been divided up between universities and technical colleges.

All this goes to show how difficult it is to compare, even within one and the same country, faculty enrolments of different years. If in the following pages an attempt is nevertheless made, it is only to bring out some very general trends which are important for the

purpose of our study and which are so marked that all the difficulties which have been enumerated cannot obliterate them. In order not to lose ourselves too much in conjecture we shall confine ourselves to a few large groupings which, at least in Europe, and as far as law and medicine are concerned also in America, have still a more or less definite meaning.

To facilitate matters further, and for purposes of comparison, only ten representative countries have been selected: Belgium, Czechoslovakia, Denmark, France, Germany, Great Britain, Holland, Switzerland, Yugoslavia, and the United States. They are representative because they include predominantly agricultural and predominantly industrial countries; countries with universities of four or five hundred years' standing and countries which have only in more recent times developed full systems of higher education.

TABLE III. *Student enrolments by faculties or subjects in a selected group of ten countries*

<i>Belgium</i>	<i>Law</i>	<i>Medicine</i>	<i>Arts</i>	<i>Science</i>	<i>Technical Institutions</i>
1913/14 . . .	1,047	1,336	900	2,087	2,414 ¹
1925/6 . . .	877	1,082	1,279	2,285	2,311
1930/1 . . .	1,152	1,930	1,608	2,749	1,590
1933/4 . . .	1,304	2,624	2,311	2,594	1,670
Increase (or decrease) (1913/14 = 100)	124.5	196.4	256.7	124.3	69.1

(1) Technical subjects which are part of university curricula; excluding the Écoles Supérieures de Commerce and Écoles Techniques Supérieures.

<i>Czechoslovakia</i>	<i>Law</i>	<i>Medicine</i>	<i>Arts, Science</i>	<i>Technical Institutions</i>
1913/14 . . .	3,174	1,854	1,822	6,072 ²
1924/5 . . .	5,857	4,005	2,319	10,966
1929/30 . . .	8,583	5,383	2,638	12,300
1933/4 . . .	8,671	7,102	2,495	7,997
Increase (1913/14 = 100) .	273.1	383.1	136.9	131.7

(2) Including architecture, mining, mechanical, chemical, and electrical engineering, agriculture and forestry, surveying, and others.

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TABLE III (*cont.*).

<i>Denmark</i>	<i>Law</i>	<i>Medicine</i>	<i>Arts</i>	<i>Science</i>	<i>Technical Institutions</i>
1913 . . .	766 ³	739	396	146	..
1925 . . .	989	998	726	336	1,624 ⁴
1930 . . .	1,129	1,247	1,042 (1932)	422	2,121
1934 . . .	1,366	1,587	977	393	2,678
Increase (1913 = 100)	178.3	214.7	246.7	269.1	164.9 (1925 = 100)

(3) Without political science.

(4) Higher technical (engineering) institute, veterinary, agricultural, and higher commercial colleges and courses.

<i>France</i>	<i>Law</i>	<i>Medicine</i>	<i>Arts</i>	<i>Science, Technical Institutions</i>
1913 . . .	16,763	8,247	6,398 ⁵	6,639
1924 . . .	16,883	11,015	9,042	10,788
1930 . . .	19,586	16,246	16,928	13,601
1932 . . .	22,982	25,020	14,500 ⁶	15,025
Increase (1913 = 100)	137.1	303.3	226.6	226.3

(5) 'Lettres.'

(6) Approximate.

<i>Germany</i>	<i>Law</i>	<i>Medicine</i>	<i>Arts</i>	<i>Science</i>	<i>Technical Institutions</i>
1914 . . .	9,387	17,025	13,713 ⁷	8,958	15,574 ⁸
1925 . . .	16,368	8,811	9,945	10,739	28,555
1931 . . .	20,839	27,934	28,977	17,505	28,792
1932 . . .	18,364	31,570	22,766	15,088	26,532
1933 . . .	15,115	31,551	18,799	14,217	22,670
1934 . . .	11,255	28,032	16,755	10,648	18,346
Increase (1914 = 100)	119.9	164.6	122.1	118.9	117.8

(7) Including philosophy, philology, pedagogy, teaching, history, &c.

(8) Including higher technical colleges (Technische Hochschulen), forestry, agriculture, mining, commerce; *excluding* pedagogical academies.

TABLE III (*cont.*).

<i>Great Britain</i>	<i>Medicine</i>	<i>Arts</i>	<i>Science</i>	<i>Technical Institutions</i>
1925/6 ⁹ . . .	8,690	20,760 ¹⁰	7,331 ¹¹	4,053 ¹²
1930/1 . . .	9,889	24,673	7,868	4,274
1933/4 . . .	11,951	24,788	8,757	4,439
Increase (1925/36 = 100)	137.5	119.4	119.5	109.5

(9) As the figures for Oxford and Cambridge appear in the statistics published by the University Grants Committee for the first time in 1925, it has been impossible to ascertain enrolment figures by faculties for the years previous to 1925.

(10) Including theology, fine arts, law, music, commerce, economics, education.

(11) Pure science.

(12) Including engineering, applied chemistry, mining, metallurgy, architecture.

<i>Holland</i>	<i>Law</i>	<i>Medicine</i>	<i>Arts</i>	<i>Science</i>	<i>Technical Institutions</i>
1913/14 . . .	955 ¹³	1,809	350	517	1,536 ¹⁴
1925/6 . . .	1,296	2,604	1,909	1,410	1,638
1930/1 . . .	1,816	3,230	1,520	1,784	2,939
1933/4 . . .	1,895	3,766	1,688	2,091	3,369
Increase (1913/14 = 100)	198.4	208.1	482.3	404.4	219.3

(13) Including economics and special courses for colonial administration.

(14) Technical college in Delft, agricultural, commercial, and veterinary colleges.

<i>Switzerland</i> ¹⁵	<i>Law</i>	<i>Medicine</i>	<i>Arts, Science</i>	<i>Technical Institutions</i>
1913/14 . . .	937	1,121	2,006	967
1925/6 . . .	1,658	1,472	2,258	1,145
1930/1 . . .	1,662	1,498	2,162	1,170
1934/5 . . .	2,238	1,934	2,916	1,317
Increase (1913/14 = 100)	238.8	173.4	145.4	136.2

(15) Swiss students only.

<i>Yugoslavia</i>	<i>Law</i>	<i>Medicine</i>	<i>Arts, Science</i>	<i>Technical Institutions</i>
1925	2,926	1,359	2,328	3,713
1933	4,872	1,246	3,754	4,607
1934	5,772	1,429	3,064	4,661
Increase (1925 = 100)	197.2	105.1	131.6	125.5

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TABLE III (*cont.*).

<i>U.S.A.</i>	<i>Law</i>	<i>Medicine (with- out dentistry)</i>	<i>Teaching</i> ¹⁶	<i>Engineering Schools</i> ¹⁷
1913/14 . . .	20,958	16,940	96,034 ¹⁸	..
1921/2 . . .	29,011	17,522	..	56,649
1925/6 . . .	40,359	19,680	316,871	59,315
1929/30 . . .	41,426	21,955	..	74,000
1931/2 . . .	37,170	24,040	334,638	77,041
Increase (1913/14 = 100)	177.3	141.9	348.4 (1910 = 100)	135.9

(16) Teachers' training courses (teachers' colleges, normal schools, colleges, and universities). The arts and science departments and courses in American universities and colleges have undergone such changes during the last twenty years that pre-War and post-War figures are altogether incomparable. We are therefore giving in this column only the number of those students who are following teachers' training courses, whether in teachers' colleges and normal schools or in universities and colleges, these students in most European countries being classed with arts and science students.

(17) Engineering: architectural, chemical, civil, electrical, mechanical, mining, and others.

(18) 1910.

Some interesting inferences can be drawn from this table. It appears that the study of medicine as well as the courses of arts and science have been more in favour than the study of law or of technical subjects. With the exceptions of Yugoslavia¹ and Switzerland² there is no country which shows its largest increase of numbers either in law or in the technical subjects. Even in the United States, the Mecca of technologists, the increase of enrolments in the old-established technical schools and courses is smaller than the increase in any of the other groups. The same is true of other industrialized countries, such as Belgium, Czechoslovakia, and Germany.

¹ The exceptionally large increase in law students in Yugoslavia and—at a respectful distance—in Czechoslovakia can be explained by the fact that both these countries had to build up their own administrative and judicial systems after the War, and required for this purpose a large number of legally trained people.

² The increase in Switzerland is due to a number of special reasons. Two, above all, help to explain it: on the one hand the considerable increase in the number of students of the social sciences and of economics, who in Switzerland are counted with the students of law, and on the other hand the fact that admission to the law profession has only in recent decades been controlled and that, contrary to the state of things before the War, most candidates for the law are now taking regular law courses in the university.

A partial explanation of this lag can be found in our table. It shows that the increase in the number of students of technical subjects has in several countries been very much smaller during the period since 1930 than in the preceding periods, and that in two countries there has been an actual decrease. As this phenomenon coincides with the worst economic depression the western world has witnessed, a depression which above all has affected industrial development, one is probably justified in concluding that student enrolments have reacted to decreasing chances of employment. However, this explanation is not altogether satisfactory, as it does not explain the comparatively slow increase even during the years preceding the crisis. Can it be that the engineer has become a victim of his own ingenuity, that he has been one of the first to suffer from technological unemployment, which if persistent would naturally depress also the supply of engineers?

The difference in the rate of increase of law and of medical students is very considerable—the difference being largely in favour of medicine—and it is difficult to give a satisfactory explanation of this. Suffice it to say that there are both psychological and economic reasons which may help explain the situation, at least as far as the increase in the medical faculty is concerned. It has been stated repeatedly, and there is probably a good deal of truth in the statement though it cannot easily be corroborated, that young people flocked to medical courses after the War because their imagination had been kindled by the suffering and sickness they had seen during the War and the first years after it. The figures for Belgium and Czechoslovakia, which register a particularly heavy increase for the period from 1913 to 1925, would bear out this statement. On the other hand we find no confirmation in the figures for France and Germany. In Germany the particularly heavy cost of medical studies may have acted as a deterrent during the first four years after the War. On the other hand it must not be forgotten that systems of medical insurance were either established or greatly developed in most European countries after 1913, which increased the demand for medical services.

The most remarkable picture revealed by our table lies in the extraordinary increase in the number of arts and science students. It has already been emphasized that in Europe the bulk of the students of these faculties are preparing for a teaching career. In other words the increase in the arts and science faculties indicates

above all an increase in the number of people who plan to go in for a teaching career. For America only the enrolments in the teaching courses have been recorded; these show a similar growth. In anticipation of a fuller analysis two reasons for the increase in the number of prospective teachers might be suggested. 'To begin with, it is a well-known phenomenon in Europe that a very large percentage of the 'new' students, i.e. the students from social strata which are for the first time sending their children to college or university, choose teaching as their career. The teacher they have known as children, with all his influence and standing, is the *Wunschbild* which they follow. Secondly, we can only repeat what has been said at the beginning of this chapter, that the twentieth century is the century of education. With the progress of democracy education finds a new place in society. It is unfortunate, however, that the wishes of the people who flock to college and university, afterwards to pass on their education to others, are usually—at least in Europe—ahead of the authorities who are responsible for the development of education facilities, with the result that when the young teachers leave college or university there are often no schools in which to teach. 'This last argument concerning the correlation of democracy and the increase in the number of prospective teachers is incidentally borne out by a glance at the figures for Germany, which show that while from 1925 to 1931 under the Republic the enrolments in the arts faculty increased from 9,945 to 28,977, they decreased with the growing national-socialist agitation and under the new régime to 16,755 in 1934.¹

1935-1936

The information available for the years 1935 and 1936 is incomplete and therefore does not lend itself to comparisons between a large number of countries. In most countries official statistics of enrolments are only published after a delay of one, two, three, or even more years. Yet even the scanty information obtainable indicates that student enrolments during the last few years have not fluctuated much except where, as in Germany or Bulgaria,

¹ It hardly needs pointing out that the sudden drop in the German figures has not only political reasons. A full analysis of the German situation will be given when discussing the measures which have been devised to overcome the overcrowding of the universities.

access to the universities has been limited by legislative action. More will have to be said about these developments later on. In most other countries enrolments have remained stationary or have fallen slightly. With the possible exception of France, where total enrolments decreased from 87,152 in 1933-4 to 82,218 in 1934-5, the last year for which figures are available, the decrease both in the number of first-year students and in total enrolments has been insignificant. This means that the proportion of young people reaching college age who actually enter a university is on the increase, for it must not be forgotten that those who attained college age during the years 1934-6 were born between 1916 and 1918, the period during which the birth-rate in the belligerent countries and also in the neutral countries was exceptionally low. The reasons for this phenomenon, which for the purposes of our study is infinitely more important than the slight fluctuations in the total enrolment, will be analysed in some detail in the next chapter.

Student enrolments in the United States, after a temporary setback during the years 1932 and 1933, which was altogether due to the depression, are on the up-grade again. This is clearly revealed by the figures given each December in *School and Society* by Raymond Walters. The total enrolments during the year 1935-6 exceeded by 6.6 per cent. those of 1934-5, which in turn exceeded those of 1933-4 by 5 per cent. The increase in the number of freshmen is even more marked. Enrolments of first-year students in 1935-6 were 7.4 per cent. above those of 1934-5, which exceeded those of the previous year by 1.4 per cent.¹ This educational recovery was largely made possible by the Federal Government, which in 1934 made comprehensive plans for helping needy students. According to this student aid programme, which was first administered by the Federal Emergency Relief Administration (F.E.R.A.) and later taken over by the National Youth Administration (N.Y.A.), every student is to receive help who would be unable without it to enter college or, if already registered, to pursue his studies. The subsidies, which are not to exceed \$20

¹ Dr. Raymond Walters, 'Statistics of Registration in American Universities and Colleges 1935', in *School and Society*, vol. xli, Dec. 4, 1935, pp. 801 ff. We refrain from quoting absolute figures recorded in this article as they are not altogether comparable with the figures for the United States given in Table I, which were taken from the official statistics compiled by the U.S. Office of Education.

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per month, are paid for work done by the student and created or secured by the educational institutions in collaboration with the State Relief Administration. By October 1935, 106,000 undergraduates were assisted in this way, at a total cost to the Government of more than one million and a half dollars per month.

II

CAUSES FOR THE INCREASE IN STUDENT ENROLMENT

IT lies in the nature of human manifestations that they cannot be traced to any simple cause or even class of causes. In order to understand social phenomena, man has to be seen both in his individual entity and in relation to the social, economic, and political structure of the society within which he lives. As his acts influence society, so does the particular historical situation into which he was born determine his acts.

Any given society is the product of the interplay of numerous forces which themselves can only be understood in relation to each other. They are like colours which, even though they may appear in the same quantities, help to produce a multitude of pictures. It is important to grasp their harmonies and affinities, to know the way in which they mix, yet all this knowledge will help us only very partially to understand a given picture. As a matter of fact the more we concentrate our attention on any one colour or group of colours the less we shall understand the picture, which has to be seen as a whole. The fact that we are so singularly lacking in a clear understanding of present-day society is to no small extent due to our failure to distinguish between the necessary analysis of individual forces and the grasp of the combined effect of these forces in their particular historical constellation. Worse than that: there are too many people who see red, and red only, i.e. who attempt to interpret everything in terms of economic self-interest.

The fault does not lie with the economists who have analysed the importance of self-interest in human action. Most of the modern economists recognize that beyond economic considerations there are other forces which determine even economic behaviour. It is the layman, the politician, and, alas, often the educator who finds the colour more interesting than the picture. There is this to be said in his favour, that there was a period in western civilization, a particular society, in which the desire for personal economic gain was all-powerful. It was the society into which he was born. He overlooks, however, the fact that in every society there is the element of change, which is not only quantitative but also

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qualitative. Not only do things which can be measured quantitatively grow or diminish, but motives and values change also. As society develops towards ever new forms, its scales of value alter, old motives lose in weight and new ones become more prominent. There are even to-day primitive peoples who work only as long as is absolutely necessary to satisfy their simple needs. No monetary advantages will induce them to do more. Similarly it is becoming increasingly obvious that the desire to serve a group or simply to submit to its will, irrespective of self-interest, is a powerful motive behind the acts of many people in more than one of the new totalitarian states.

Any interpretation of social phenomena must, therefore, begin with the realization of the changing nature of society, presenting itself in ever new 'pictures', a new wholeness. Man always lives between the ages. His true position is between the past and the future. He is determined both by cause and by effect, by the picture of the society before him, the contours of which can or ought to be clearly seen, and the dim outlines of the new pattern of society in the making. Patient search and research will deepen the understanding of the society from which we rise. It will also help us to grasp the direction in which society is changing. And as we look forward in the direction of change, inspiration will aid us both to understand our particular historical situation and to see the outlines of the society to come.

These general considerations are not gratuitous. They create a frame of mind in which the effort to show certain 'causes' of the extraordinary increase in student enrolments will be viewed with proper modesty. In following up certain of these causes we shall not lose sight of their interdependence, which makes it so difficult to attribute the proper weight to each of them. This caution will prove even more important when in later chapters an attempt will be made to discuss possible 'remedies', to 'plan' for the future. We shall not propose any panaceas, which are obviously futile and dangerous where we are faced with a multitude of interdependent causes.

While all the elements responsible for the present situation in the institutions of higher learning are interrelated, it is yet obviously possible to group together those causes which show some degree of affinity. Thus we shall deal with the demographic, the economic, the political, and the social origins of the growing urge

for higher education, as well as with certain other elements arising out of the deficiencies of the prevailing system of education.

I. THE LESSON OF DEMOGRAPHY

The last few decades, as has been shown, have witnessed a disproportionate increase in the number of students as compared with the increase in population. In many countries student enrolments have grown twice or three times as rapidly as the populations from which the students were drawn. It would be erroneous, however, to conclude from this statement that vital statistics can throw no light on the rise and fall in numbers of college and university students.

Notwithstanding the lack of conclusive evidence it may safely be assumed that students come primarily from small families. The cost of higher education is considerable and constitutes a heavy drain on the family income. Scholarship funds and other measures to facilitate the studies of poor students are on the whole inadequate, certainly if measured by the desire of an ever-widening section of the population to give its children the benefit of a higher education. Thus it is generally speaking only the small family—particularly within the middle, lower middle, and working classes—which can afford to send its children to the university. This fact has been emphasized by Professor Vincenzo Castrilli in a communication to the Twelfth Congress of the International Institute of Sociology in 1935.¹

The only European publication which has come to our notice dealing statistically with the relation of student enrolment to the size of the students' families fully confirms this assumption. The German university statistics for the winter term 1933-4 deal with the problem for the first time, and show that nearly half of the German students come from families with one or two children; roughly only 25 per cent. belong to families of three children and only the last quarter to families of four or more children.²

The absence of similar comprehensive statistics for other countries makes it impossible to show any marked variations of this

¹ Professor Castrilli's interesting paper has been published in Italian under the name *L'Origine sociale degli studenti—Contributo allo studio del ricambio sociale* by the Comitato italiano per lo studio dei problemi della popolazione, Rome, 1935.

² *Deutsche Hochschulstatistik*, Band 12, Winterhalbjahr, 1933-4, Berlin, 1934, pp. 21 ff.

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phenomenon from country to country. It may be counteracted somewhat in Great Britain, where the universities and local authorities have made exceptionally generous provisions to facilitate the study of gifted but impecunious students, and in the United States, where students are better able than in any other country to work their way through college, and where in recent years large numbers of students have been assisted by government grants.¹ Yet the fact remains that in all countries of the west the sudden increase in student enrolments since the beginning of this century coincides with a very marked fall in the birth-rate. To give only a few examples: from the period 1886-90 to the year 1933 the birth-rate decreased in Belgium from 29.4 per 1,000 inhabitants to 16.6; in France from 23.3 to 16.3; in Germany from 36.4 to 14.7; in Great Britain from 31.4 to 14.2; in Holland from 33.6 to 20.8; in Sweden from 28.8 to 13.7; in Switzerland from 27.5 to 16.4.² An analysis of the variations in the birth-rate of the United States previous to the early twenties of this century is not helpful for our purposes, owing to the large-scale immigration up to 1922. Yet it is interesting to note that the American birth-rate has decreased from 22.5 per 1,000 inhabitants in 1921-5 to 16.4 in 1933. Student enrolments, on the other hand, have increased between 1900 (1900 = 100) and 1933-4 to 209 in Belgium; to 296 in France; to 250 in Great Britain; to 261 in Germany;³ to 485 in Holland; to 342 in Sweden (first-year students only); and to 288 in Switzerland (Swiss students only).

In the light of these figures and the general considerations which preceded them it is possible and permissible to establish a direct ratio between falling birth-rates and growing student enrolments.

¹ Cf. O. Edgar Reynolds, 'The Social and Economic Status of College Students', Teachers' College, Columbia University, *Contributions to Education*, No. 272, New York, 1927, pp. 35 ff. Reynolds's data relating to the year 1923-4 are based on a study of the student body of fifty-five colleges and universities representing a cross-section of American institutions of higher learning. As Reynolds had to resort extensively to the method of 'random sampling' his findings are not as conclusive as those furnished by the official German university statistics. They show that 33.35 per cent. of the students who furnished information came from families of two children, 21.37 per cent. from families of three children, and 45.28 per cent. from families of four and more children.

² See Robert R. Kuczynski, *The Balance of Births and Death*, vol. i, 1928; see also *Annuaire Statistique de la Société des Nations* 1934-5, Geneva, 1935.

³ Increase 1900-32; the figures for the following years, which show a considerable decrease, are misleading because they are determined by the restrictive measures taken by the German Government in 1933.

Western civilizations show a decline in natural fertility. The falling birth-rate is, however, undoubtedly also due to the growing practice of birth-control which is caused, at least partly, by the clash between the desire of the imppecunious classes to advance in the social scale through their children's better education and the narrow economic limits within which such an advance is possible. In the case of the middle and upper middle classes birth-control has been practised for a long time, partly because these classes were the first to which the means of birth-control were available, and partly also because the economic situation of these classes, even before the War, was often such as to make it difficult for them to give their children the kind of education they needed to maintain themselves within their class.¹ Since the War, which meant impoverishment to large sections of the middle and upper middle classes, the struggle to maintain themselves high up in the social scale has become frantic. This has resulted in a further substantial decrease in the birth-rate.

If further corroboration is needed for the statement that falling birth-rates do not necessarily mean decreasing student enrolments but rather the opposite, such corroboration can be found in the matriculation figures for first-year students during the years since 1933 and 1934, for these students were born during the War period from 1915 to 1919, characterized by a particularly low birth-rate. It was generally held that this low birth-rate would result in a substantial drop in the matriculation of first-year students after 1933. In the course of an Inaugural Address to the Royal Statistical Society, delivered on November 20, 1934, Professor Major Greenwood observed: 'Births fell to a minimum in 1917-19. In 1920 there was a large increase, and by 1926 the secular decline had brought the quota down to the 1917-19 level.

¹ A. M. Carr-Saunders emphasizes this point, as shown in the following quotation: 'As a motive for keeping the size of family small the fear of unemployment is probably far less important than the ambitions of parents for their children. Those well placed want their children to find openings in their own level of society, and those less well placed want their children to have a chance to reach a higher level than they themselves occupy. To achieve these ends it is necessary to maintain children while they are acquiring further education and often to pay for that education; also it is often necessary to pay premiums and entrance fees and to support children until they can establish themselves. There is here a powerful incentive to limit the size of family in the interests of the children.' (Cf. A. M. Carr-Saunders, *World Population*, Oxford, 1936, pp. 249-50.)

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If we take 18 to 19 as the model age of entrants to a University, 1935-6 should feel the decline; there should be a recovery in 1938-9 and then the decline . . . should be unbroken.' The report of the University Grants Committee in Great Britain, from which we take this quotation, points out that this forecast has not come true: 'If birth-rate figures were the sole factor to be taken into account, Professor Greenwood's forecast would no doubt be realized. But there are other influences at work. In 1933-4 and 1934-5 the figures for first-year University entrants certainly show a slight decline—189 in 1933-4, and 374 in 1934-5. But if it is borne in mind that the total number of such entrants is in the neighbourhood of 15,000, the decline will be seen to be relatively negligible.'¹ Similarly we find that student enrolments in France, where the birth-rate during 1915-19 reached the all-time low of 11.3 per 1,000 inhabitants (18.8 during 1911-14), show only a very slight decline. As the French statistics do not give the first-year students, the total enrolments have to be cited. The total number of students in French universities and other institutions of higher learning increased from 82,655 in 1931-2 to 84,638 in 1932-3, and to 87,152 in 1933-4. Only in 1934-5 is there a decline to 82,218 which is, however, partly explained by a decrease of 2,356 in the number of foreign students. In Holland the number of first-year students remained practically stable (1931-2: 2,562; 1932-3: 2,606; 1933-4: 2,514) in spite of a decrease in the birth-rate from 28.1 in 1911-14 to 25.8 in 1915-19. The situation in Austria is similar: in spite of a 10 per cent. decrease between 1930 and 1935 in the number of persons in the total population aged 19-23 we find that student enrolments in 1930 and in 1935 are practically the same, hence an increase of 10 per cent. in the number of students in relation to the population of college age.² These few examples are obviously not conclusive, particularly as the effect of the decreased birth-rate during the War period will only appear in full force during the years 1936-7, for which no statistics are available. The few data to hand seem to indicate, however, that the low birth-rate during the War years will not affect student

¹ University Grants Committee, *Report for the period 1929-30 to 1934-5*, London, 1936, p. 27.

² Professor Wilhelm Winkler, *Die Überfüllung der Hochschulen und die Arbeitslosigkeit der Akademiker*, Report submitted to a conference on the overcrowding of the institutions of higher learning, organized by the Austrian Committee of the International Student Service, Vienna, May 1936.

enrolments substantially. This proves again that the deficit in births is being to a large extent compensated by the desire for more education, which is certainly partly responsible for the further fall in the birth-rate after the temporary high in 1920-1. Families which during the War found it impossible to bring children into the world continue to remain small and are thus in a better position to realize the dream of a better education for their children.¹

There are obviously limits to the application of this 'law'. The birth-rate cannot fall below a certain point without an actual decrease in the number of students. This point will be reached when those social classes which at present provide the largest number of students—the upper and middle classes—produce so few children as to be unable to replenish the universities. It will be attained more quickly where the lower classes, for economic, social, or other reasons, find access to higher education particularly difficult. No European country seems to have reached that point. France, owing to the extremely low birth-rate during the War and the privileged position of the upper and middle classes in matters of education, seems to have come closest to it. The slight decline in student enrolments in 1934-5 is, however, likely to be quickly compensated, thanks to the establishment of the *école unique*, which is opening up higher education to the lower classes.

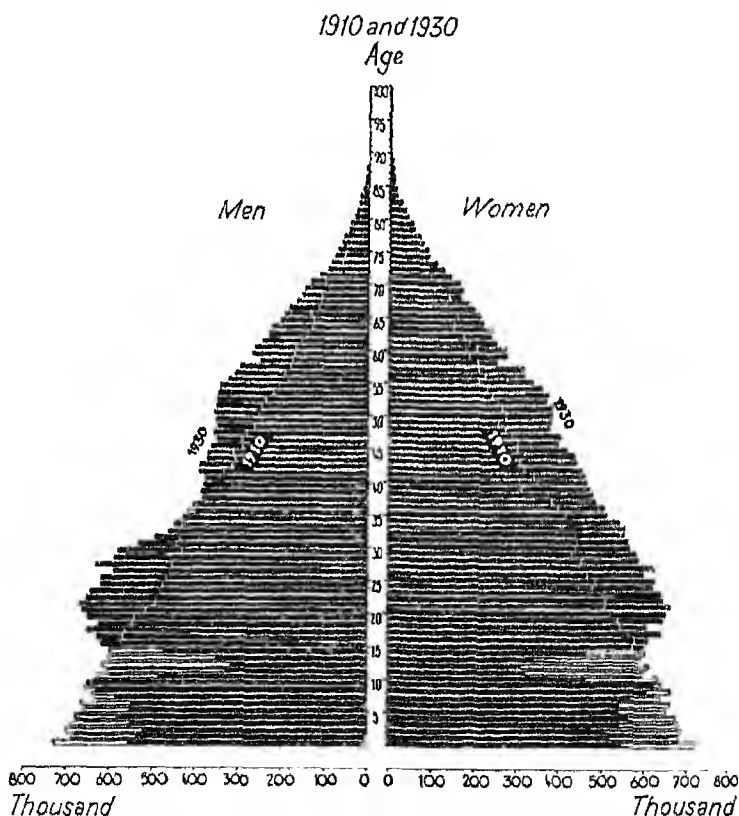
Owing to a decline of the mortality-rates even more rapid than that of the birth-rates, the total population of most of the western countries is still increasing. Not only is there an extraordinary and most encouraging decrease in child-mortality, but life-expectancy is on an upward trend. People live longer than they did twenty or thirty years ago. The 'age-pyramid', gradually diminishing from the broad base which is the sign of steady fertility, has since the beginning of the century undergone most radical deformations. Reinhold Schairer, who was one of the first

¹ George S. Counts in his *Inglis Lecture*, 1929, develops the thesis that with smaller families greater attention is paid to the education of the children, which according to him partly explains the increased enrolments in American high schools. In the same lecture he deals with various other causes for the growth of secondary education which, *mutatis mutandis*, apply also to the growth in college and university enrolments. Counts's exposition fully corroborates the position taken particularly in section two of this chapter. (Cf. George S. Counts, *Secondary Education and Industrialism*, Cambridge, 1929.)

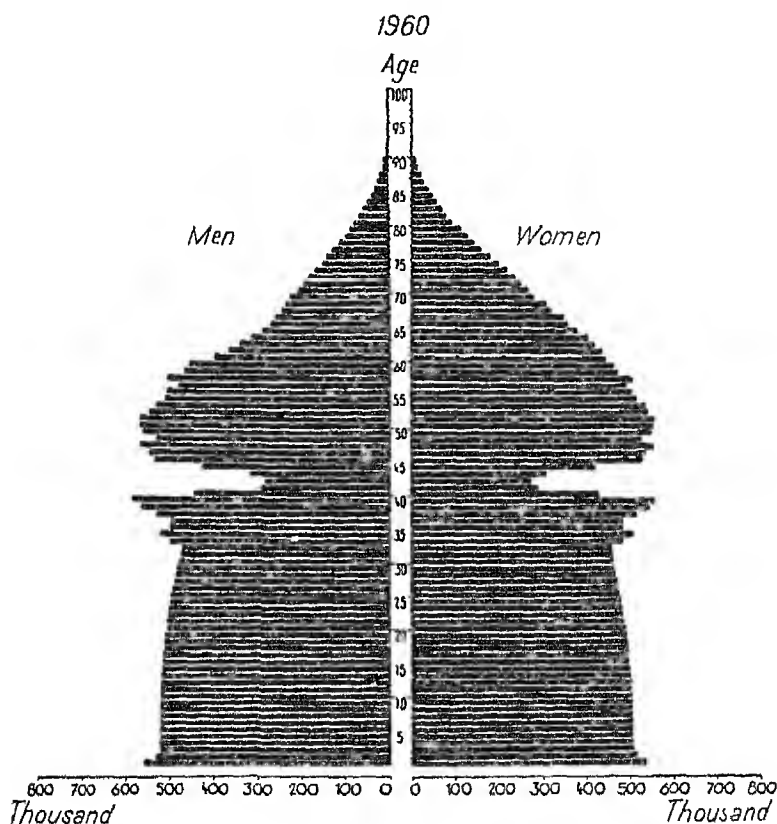
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 in Germany to realize the dangers of an unplanned and uncontrolled expansion of higher learning, gives in his book, *Die akademische Berufsnot*, a most revealing graph, showing the composition of the German people by age in 1910 and 1930 and its probable composition in 1960.¹ It is reproduced in Table IV.

Schairer's graph for the year 1960 is of course based on estimates of future birth-rates which may and probably will prove erroneous. It was impossible to foresee at the time when his book was written

TABLE IV. *Composition by age of the German population, 1910, 1930, and 1960*



¹ Reinhold Schairer, *Die akademische Berufsnot*, Tatsachen und Auswege, Jena, 1933, pp. 76-7. We are greatly indebted to Dr. Schairer for permission to reproduce his table.

TABLE IV (*cont.*)

that owing to a change of régime every effort would be made artificially to increase the birth-rate by way of marriage- and children-allowances, and above all by the kind of intensive propaganda for which Germany has become famous since the accession of Hitler to power. Even by 1934 the German birth-rate had increased to 18.0 per 1,000 inhabitants from 14.7 in 1933. Thus the base of the pyramid in 1960 may be wider than Schairer anticipated. The fact, however, will remain that the age-group from 45 to 60 will be very much larger than in 1910 or even in 1930.

A more detailed study of the same problem in England was made in 1934 by Dr. Enid Charles of the Department of Social Biology

in the University of London.¹ She gives estimates of the probable trend within the next hundred years. On the assumption that fertility and mortality remain constant at the 1933 level, the age-group under 15 will decrease in twenty years to 79 per cent. of its 1933 figure. If fertility and mortality continue to fall in the manner suggested by figures available for the last decade, the age-group under 15 will even decrease to 57 per cent. of the 1933 level. At the same time the age-group of 60 years and over will increase to 132 per cent. within the next twenty years if the first assumption is correct and to 143 per cent. if the second is proved to be right.

Without labouring these figures too much—it is after all very likely that in England, too, efforts will be made to check the present fall in the birth-rate, which is not so much due to a lack of fertility as to the growing practice of birth-control—it is evident that the populations of the western world are ‘ageing’; in other words, that the older group is constantly growing at the expense of the younger.

These changes in age-distribution are also likely to affect student enrolments, though it is very difficult to foretell in what way. One is tempted to conclude that for some time to come they may tend to increase university enrolments. The drop in the birth-rate has been very rapid during the last twenty years, with the result that the age-groups up to 20 are small compared with those from 20 to 60, which go back to years of high birth-rate. In other words, the ‘sustaining’ group is large in comparison with the ‘supported’ group and therefore better able to afford a higher education for its young. This is not likely to last. There are abundant signs that the ‘ageing’ of society is putting an additional burden on those who are gainfully occupied. People may live longer, but they are not expected to work beyond a certain age. The nerve-racking processes of modern industrial life require the energies and the quick reactions of the young. Industrial workers above 40, once unemployed, find it extremely difficult to get re-employed. The situation in the professions is not nearly so bad, and there is even a tendency amongst independent practitioners to prolong their period of work, but efforts are on foot practically everywhere, in schools, public offices, and private enterprises, to lower the retiring

¹ Enid Charles, *The Effect of Present Trends in Fertility and Mortality upon the Future Population of England and Wales and upon its Age Composition*, London and Cambridge Economic Service, Special Memorandum No. 40, London, 1935.

age. To facilitate these measures and to give security to the worker, old-age insurance schemes are being elaborated and introduced. The burden of these schemes has obviously to be borne by those who are still in the productive process. Their means have to be divided between the support of the old and the young, and as the needs of the old become more pressing the young are likely to suffer. Thus, while decreasing mortality-rates may for a short time stimulate the extension of higher education, they are likely to have the opposite effect in the near future.

To summarize: The considerable increase in student enrolments coincides with a very marked decline of the birth-rate in the western countries, which itself is at least partially due to the desire of parents to give their children a higher education. The prevailing low birth-rate, therefore, foreshadows further high student enrolments. The decline in mortality with its consequent ageing of the population may for some time further increase student enrolments but is in the long run *ceteris paribus* likely to have the opposite effect.

II. CHANGES IN THE ECONOMIC STRUCTURE

The primacy of economic thought and life over all other manifestations of the human race has for a long time gone unquestioned. Economic factors, economic motives, economic action were held to be the alpha and the omega, the very meaning of the life of man. In more recent years this conception of the world has been frequently challenged even by some of those who have grown up in a materialistic conception of the world—witness such stimulating and searching studies as Henri de Man's *Au delà du Marxisme*.¹ Dictators like Hitler or Mussolini have obtained their hold over the masses by appealing to the ascetic impulses of their countrymen and by putting forward such notions as 'national honour' or the 'sanctity of manual work' which are non-economic in character.² In spite of this it is obvious that economic forces, though they are not alone in moulding mankind, rank high amongst the determining factors in the building of society.

¹ Henri de Man, *Au delà du Marxisme*, Paris, 1929.

² It is true, of course, that these appeals were made during a time of economic stress, and that they might not have been successful during a period of general well-being. Yet the 'sense of liberation' which seems to pervade wide sections of the German and Italian peoples in spite of continuing and even accentuated economic duress indicates that economic self-interest is not the only motive behind human behaviour.

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The expansion of higher education is narrowly linked up with the economic development of the last hundred years. The connexion between the two is so close that it is unnecessary to bring the whole cumbersome apparatus of statistics into operation to prove it. The *Biennial Survey of Education, 1928-1930*, contains a passage¹ illustrating the relationship between economic advance and higher education which is so striking that we may be excused for quoting at some length:

‘ . . . During the war and the years immediately following, attention began to be focused sharply on the colleges and universities of the country not merely as instruments of liberal culture and professional training but to an increasing extent as instruments of national service. The entrance of the United States into its post-war industrial and commercial activity throughout the world called immediately for larger numbers of well-educated men and women to take advantage of the great economic opportunities which were rapidly opening up to this country; thus the great industries and all forms of commercial enterprise stimulated the new type of college education which began to centre on a diversity of vocational aims for the purpose of serving the demands of our growing economic life. It is the entrance of a vast army of youth in quest of utilitarian education and training which has been most responsible for the new problems of college administration and for bringing into being new criteria of college education, namely, those of the industrial and business leaders who are thinking in terms of business efficiency and dispatch. These criteria not only have affected engineering, technical and commercial education, but also much of the work in colleges of liberal arts and science.

‘The enormous expansion in industrial activity which must bear a full share of responsibility for the changing attitudes and practices in higher education best may be illustrated by the following statements: In 1902 there were 3,620 power plants in the United States; in 1917 these increased to 6,542. In 1928 this number was reduced to 4,352, but the size of the average power plant in 1920 was seventeen times greater than that of 1902. The capital invested in 1902 was half a billion dollars; in 1928 it had increased to 10.3 billion dollars. Considering the total production of the following commodities during the history of the country, 78 per cent. of our coal, 92 per cent. of our oil, and 98 per cent. of our electric power were produced since 1900.

‘The horse-power of all prime movers in the United States in 1900 was estimated at 70,000,000, including work animals, engines, auto-

¹ *Biennial Survey of Education, 1928-1930*, Office of Education Bulletin 1031, No. 20, Washington, 1932, pp. 465-6.

mobiles, ships, railroads, mines, manufactories, and electric central stations; in 1928 this horse-power reached the figure of 1,026 millions.

'These figures and their relation to education are little understood, but they may be grasped in their full significance by those who attempt to estimate the number and the many kinds of trained men and women who have participated in and helped make possible these industrial changes and who have reached positions of leadership.'

This statement, which deals largely with the post-War situation in America, can be applied with some variations to a number of the more highly developed industrial countries of the world. In countries like England and Germany, but also in some of the smaller countries of Europe, such as Belgium, the demand for large numbers of scientists and engineers set in earlier than in the United States, which underwent comparatively late the transition from an agricultural to an industrial state of society. Also, certain differences in national attitude on the part of European countries, of which more will have to be said later, saved higher education in Europe from taking on an all too utilitarian complexion. But there can be no doubt that the colleges and universities responded to the new demands upon them and that their class-rooms and lecture halls became crowded by 'a vast army of youth in quest of utilitarian education'.

The greater demand for brain-workers caused by the industrial evolution was not confined to experts in industrial life, in business, and in banking. The growing complexity of the business of government in the broadest sense of the word led to an increasing need for highly trained civil servants, health officers, and others able to apply new scientific techniques to the organization of a large-scale society. Recent economic developments have accentuated this trend. The break-down of the *laissez-faire* principle has led to a policy under which the State assumes control over a wide range of activities which hitherto had been left to private initiative. In the countries under dictatorship this control is complete and reaches far beyond the regulative action of the State in economic enterprise. But even in countries such as England, Holland, and lately the United States the desire to assure the welfare of the people and with it a peaceful social development have obliged the governments to intervene in the economic process on an unprecedented scale. Particularly in America, thousands of new positions have had to be created in connexion with government services. New

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positions have also come into existence in private enterprises, whose dealings with the authorities have grown very much more complicated. Many of these new careers require a university training. And as with its new functions the State has also gained new prestige—much as it may be attacked—it is certain that there will be many anxious to prepare themselves for these new careers.

Last but not least, it is obvious that the growing demand for a more highly trained personnel in practically all walks of life has resulted in an expansion of the demand for teachers of every type. Facilities for primary, secondary, and higher education have been expanded, which explains much of the extraordinary increase in enrolments of students preparing for teaching careers.

The rise of industrial civilizations not only increased the demand for college and university graduates, it also made higher education more easily accessible. Two factors have to be considered in this connexion: the increase in national wealth which went with the industrialization of the modern world, and the growth of urban agglomeration which is a direct result of that industrialization.

There can be no doubt that higher education, which puts a heavy financial burden upon students and their parents, becomes more accessible with growing wealth. Yet it has been for a long time a controversial question whether increasing wealth really leads to a larger influx of students. J. Conrad, on the basis of a study of German university statistics, came as early as 1884 to the conclusion that bad times were more likely to increase student enrolments.¹ Similar observations have been made by a great many modern writers. The *Student aus Not*, i.e. the student who went to the university because, owing to unemployment, there was nothing else for him to do, was a well-known phenomenon in the German universities after the War. Giorgio del Vecchio and Paola Maria Arcari have reported a similar tendency in Italy.² In all countries there are many who prefer to continue their studies rather than face long-continued unemployment in the occupations demanding only secondary-school training which they had origin-

¹ J. Conrad, 'Das Universitätsstudium in Deutschland während der letzten 50 Jahre', in *Sammlung nationalökonomischer und statistischer Abhandlungen des Staatswissenschaftlichen Seminars zu Halle*, III. Band, 2. Heft, Jena, 1884; idem, 'Einige Ergebnisse der Universitätsstatistik', in *Jahrbücher für Nationalökonomie und Statistik*, III. Folge, Band 32, Jena, 1906.

² Giorgio del Vecchio and Paola Maria Arcari, *L'affollamento delle Università e la disoccupazione dei lavoratori intellettuali*, Rome, 1934, p. 8.

ally intended to adopt. Equally there are many who after qualifying in one subject continue their studies and accumulate further degrees. Professor G. H. Livens of the University of Wales, in a report prepared in the course of our inquiry, makes a similar observation, saying that the miserable state of trade awakens the desire for greater stability, which is sought in the professions. These tendencies are particularly pronounced in countries with a well-developed system of assistance available to all students (student kitchens, &c.), such as was built up in Germany.

As J. van Loon¹ points out, however, it is not possible to conclude from these observations that large student enrolments and times of depression necessarily go together. University statistics, even for Germany, indicate that while difficult economic circumstances may temporarily cause a certain increase in enrolments, the rapid expansion of higher education over a long period, such as that between 1890 and 1914, is due to growing wealth rather than to temporary poverty. A further observation goes a long way in explaining this apparent contradiction: periods of economic prosperity only lead to an increase in university attendance when the increased national income is divided between all classes of the community. This happened in countries like Holland,² Sweden, Switzerland, and Norway after the War, and on a smaller scale in France during a short period after the stabilization of the franc. Periods of erratic economic development such as sudden industrialization, which for some time only benefit certain groups, tend on the contrary to reduce the number of students, as such periods offer great opportunities to the enterprising outside the universities.

The growth of urban agglomerations is a by-product of the mammoth industries which require large numbers of workers to live within a narrow territory, and of the gradual concentration of business within a few centres, a concentration made possible by the improvement in the means of communication. More fundamentally, it has its origin in the rising standard of living. This rising standard finds expression in an increasing demand for industrial products and for 'services' rather than for agricultural products. Agriculture becomes proportionally less important in the

¹ J. van Loon, 'Kan er ten opzichte van de Maatschappij universitaire overbevolking zijn?' in *Het Universiteits-Vraagstuk*, Utrecht-Nijmegen, 1936, pp. 47 ff.

² 'De Toekomst der Academisch Gegradueerden', loc. cit., pp. 14 ff.

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social economy.¹ In terms of human labour this means that the city offers greater opportunities for work and often higher wages. The 'flight from the land' needs little further explanation if one adds that the amenities of city life, such as sports gatherings, cinemas, and above all greater educational facilities, preparing for the more remunerative occupations, can scarcely be brought to the land-dweller or afforded on the proceeds of agriculture.

This process is not confined to the Western world. It has been admirably illustrated in the *Report of the Government of Bengal Unemployment Enquiry Committee*:²

'In former days the middle-class Bengalis were supported largely from income derived from land. This income frequently took the form of a portion of the produce of the land they owned. They did not till the soil themselves but let it out to ryots on the understanding that the rent paid would be half the amount or some part of the produce of the land. This amount was generally sufficient to support their families. If their needs had not increased it would presumably still support them, the question of price not entering into the calculation at all. In fact, in this simple form the money value of the produce could be eliminated. But the standard of living has increased, and their share of the produce of the soil is no longer sufficient to meet their increased needs. It is necessary to supplement this with an increase in income from other sources. Some of the members of the family must take to employment other than that connected with the renting out of their land, and gradually, as the standard of living increases, other members must take to such employment. This has been one of the main causes of the break-down of the joint family system and of the gradual flow of the educated middle-classes from villages to the town. The process is by no means complete. It was caused mainly by a desire for a higher standard of living.'

The occupational statistics of country after country bear witness to the flight from the land. Two examples will suffice. In 1870, 52·8 per cent. of the American people were occupied in agriculture. They dwindled to 21·3 per cent. in 1930.³ During the same period the share of the manufacturing and mechanical industries increased from 22 to 28·6 per cent., of trade and transportation from 9·1 to

¹ For a more detailed discussion see our section on 'Occupational Opportunities in a Changing Society', pp. 301 ff.

² *Report of the Government of Bengal Unemployment Enquiry Committee*, Calcutta, 1924, vol. i, p. 10.

³ Ralph G. Hurlin and Meredith B. Givens, 'Shifting Occupational Patterns', in *Recent Social Trends in the United States*, vol. i, chap. vi, p. 284.

20.7 per cent., and of clerical service from 1.7 to 8.2 per cent. The increase in the higher service occupations is particularly significant, as for many families they are the first rung on the ladder to a college education. In Holland we see a similar though less marked development, as shown in Table V.¹ The city population increases substantially; while in 1879 only 35 per cent. of the Dutch population lived in cities of more than 20,000 inhabitants, their proportion increases to 49 per cent. in 1930.

Table V. *Percentage distribution of gainfully occupied persons in Holland, 1889-1930*

	1889	1899	1909	1920	1930
Agriculture	32	30	27	23	20
Industry	32	34	34	36	36
Commerce and transportation	16	16	18	18	21
Other occupations	20	20	21	23	23
Total	100	100	100	100	100

These statistical data reveal their meaning for our purposes in a study by Sven Wicksell of the geographical origin of Swedish students.² For every 100,000 inhabitants 311 students came from university cities, 177 from cities without universities, and only 58 from rural districts. Similar data are available for Hungary, as shown in Vincenzo Castrilli's paper which we have mentioned already. Interpreting the Hungarian university statistics for 1930, he points out that 44 per cent. of the students belonged to families living in university cities (35 per cent. from Budapest alone). This means in absolute figures that 398 students per 100,000 inhabitants came from the four university cities of Hungary. Only 90 students per 100,000 inhabitants were recruited from rural districts.

It may be unorthodox from a purely statistical point of view to attempt to generalize the findings of two countries and to apply them to others, but experience and common sense support the method in this instance. It is perfectly safe to assume that the growth of urban agglomerations has led to increased student enrolments. City-dwellers are the first to appreciate the advantages

¹ Communicated by Dr. Ph. Idenburg, Director of the Department of Educational Statistics, The Hague.

² Sven Wicksell, 'Studenteconomy', KFS Småskrifter, viii, Stockholm, 1930, pp. 30-6.

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of a higher education which primarily prepares for city occupations. Besides, higher education in all those cities which possess institutions of higher learning—and most of the more modern colleges and universities have been founded in densely populated areas—have become more easily accessible even to many of those who were not born with the proverbial silver spoon in their mouths. It is significant that the great increase in the number of English students is mainly due not to the growth of Oxford and Cambridge, but to the development of the modern universities in such cities as Manchester, Birmingham, Leeds, Sheffield, and other industrial centres.

In a word, the economic development of the last hundred years, which itself was made possible by the application of scientific methods to the processes of production and the organization of business and government, has greatly contributed to the increase in student enrolment (*a*) by creating new demands for graduates of institutions of higher learning, and (*b*) by making higher education more easily accessible to broader sections of the population.

III. THE IMPORTANCE OF POLITICAL CHANGE

The post-War scene in Europe offers a unique opportunity for studying the influence of political change upon the development of higher education. In times of peaceful evolution it is difficult to determine to what extent political factors play a role in educational progress. Governments come and go, parties rise and decline, and while these changes certainly have a bearing upon educational life, one usually has to take a long-range view in order to understand what is happening and to attribute the proper weight to the political element. Not so in times of sudden political upheaval. When the map of a whole continent alters, when that continent is shaken by revolutions and by revolutionary reforms, the political element may become dominant in moulding the educational destinies of nations.

Romania after the World War is an example to the point. From the end of the War student enrolments increase by leaps and bounds and reach dizzy heights in 1929. The University of Bucharest, which had 3,420 students in 1913-14, boasts 20,538 students in 1929 and becomes one of the largest universities in the world. What has happened? Constantin Kiritzesco, the Director of Higher Education in Romania, gives the reply in a masterly

monograph on the overcrowding of the Romanian universities,¹ on which much of what follows is based.

The Peace Treaties of Versailles, St. Germain, and Trianon gave Romania a territory and a population more than twice as large as her pre-War territory. This, however, as has been pointed out, does not explain the sudden rise in the number of students. Great changes take place in the internal structure of the country. Universal suffrage is introduced. A courageous land reform initiated during the War leads to the expropriation of the eighty or so families which owned most of the land in old Romania. These changes find their origin in a great national renaissance born of victory.

New classes of the population present themselves at the doors of the secondary schools and somewhat later at the universities. The peasant has been emancipated. His social status and to a lesser degree his economic situation have improved beyond recognition. He wants his share of higher education for his children. And he is welcomed. The Government does everything in its power to improve educational facilities. New secondary schools are opened all over the country. In 1910-11 there were 55 *lycées* and other classical secondary schools with 16,519 students in the old Romania. In the greater Romania they have augmented in 1926-7 to 366 schools with 117,803 students.

The reasons for this policy were that the country needed a larger intelligentsia and was at the same time determined that it should be Romanian in character. The first point needs little explanation. The sudden gain in territory gave rise to a host of new administrative problems whose solution demanded the services of many new officials.² Similarly the economic life of Romania received a great impetus as a result of the political consequences of the War. The transition from being a small agricultural country to being a large

¹ Constantin Kiritzesco, *Rapport sur le Surpeuplement des Universités en Roumanie*, Bucharest, 1935. This report was elaborated as one of the documents for the South-East European Conference for the Study of the Overcrowding of the Universities and the Unemployment in the Professions, organized by the International Student Service, Belgrade, Dec. 9-12, 1935.

² It is interesting to note that the increase in student enrolments is particularly marked in the faculty of law, from which the majority of the new officials are recruited. In 1921 53 per cent. of the students of Bucharest University belonged to that faculty. We only need to refer to the tables given in the section on 'Increase by faculties' in Chapter I to prove the exceptional character of this phenomenon.

economic unit with growing industries meant new opportunities in private enterprise, in business, banking, and transportation. More important than this, however, proved the necessity or the desire to create a truly Romanian intelligentsia. Before the War such an intelligentsia existed only in very rudimentary forms. At that time Romania had a small group of very highly educated officials and professional men, largely recruited from the families of big landowners and the urban middle class in Bucharest, the only large city in the country. Most of those who held important positions had received only part of their education in Romania. For the rest of their studies they went to France and to a very much smaller extent to Germany. Bucharest society spoke French as easily as Romanian and felt certainly nearer to the average Frenchman than to the Romanian peasant, who lived a life of his own and, one might say, had a civilization of his own, rich in tradition and beauty. In between the upper classes and the peasants was a rising middle class, recruited from the small provincial towns as well as from the capital, but small in numbers, owing to the almost entirely agricultural nature of the country. The sons and daughters of this class, speaking French as a foreign language, learnt in school, not chattered from the nursery, and much nearer in language, tradition, and feeling to the peasant, were the first to flock to the universities as soon as the War was over, to throw themselves into the building up of a full Romanian national culture. With the emancipation of the peasant class through the land reform and the introduction of universal suffrage the children of the peasants also found access to the universities. While the intellectual life of Romania continued to benefit by the inspiration of French thought it also grew to be more and more independent, leaning more heavily on the cultural traditions of the country, becoming more truly Romanian. The instruments by which this change was brought about were the universities. To them was entrusted the recreation and cultivation of Romanian civilization.

This problem presented itself in an even more acute form in the new territories which had been under Hungarian, Austrian, and Russian rule. Hungary and Russia, to which the larger part of the new territories belonged before the peace treaties changed everything, had used the schools as a means for the denationalization of their Romanian citizens. Although they formed the majority of the population, particularly on the land, but few of them were able to

obtain a secondary education. In Transylvania, which had been under Hungarian rule, the Romanian majority had only ten secondary schools, while the Hungarian minority had 183¹ such schools at its disposal. The overwhelming majority of the teachers, officials, and professional men were of course also of Hungarian origin. All this had to change when Romania took over that and other territories: nationalist feeling is not tolerant, particularly when it is still smarting under the memory of past oppression. Within a few months most of the Hungarian, Austrian, and Russian officials and teachers had to leave, swelling the ranks of the unemployed in Budapest and Vienna, and leaving an acute shortage of trained men and women in Romania. Not only the university of Bucharest but the universities of Cluj in Transylvania and of Cernauti in Bucovina (former Austrian territory) had to fill the gap. The stupendous increase in student enrolments is explained.

It would only mean tedious repetition to describe the development of other countries in a similar position, such as Poland, the Baltic countries, Czechoslovakia, and to a lesser degree Yugoslavia. A report from the Polish Bureau of Statistics to the author summarizes the situation in two sentences: 'The reconstruction of the State causes an intense demand for specialists of all kinds—in the administration, the judiciary, the schools, and the professions—and explains the invasion of the institutions of higher learning. On the other hand Polish society, isolated from the sources of national culture, felt an unquenchable thirst for higher learning.'

Before leaving this group of countries, however, one further observation must be made. The sudden expansion of higher education after the War corresponded to a real need. Since then the available positions have been filled—largely by young people who have a long period of office or professional work ahead of them and are not likely to leave their positions—and the national life of these countries has been safely established. Nevertheless, young people continue to flock in large numbers to the universities, nearly as many as during the peak years after the War. The countries have become 'college-minded', with the result that a regular army of unemployed graduates has come into existence. In the absence of real foresight and planning, the blessing of ten or fifteen years ago has turned into a curse upon the younger generation.

India offers another example of a country where a specific

¹ Including lower high schools.

political situation has helped to cause an invasion of the universities and the overcrowding of a particular faculty, viz. that of law. Dr. S. K. Datta, our chief collaborator in India, Principal of Forman College, Lahore, points out that in all conquered countries bureaucracy enjoys a particular prestige, as it represents the ruling classes. Besides, in view of the fact that primary education in India is not nearly as developed as higher education, the demand for professional services on the part of the masses is small. Government posts are more attractive because they are better paid and offer some security of tenure. 'To study law means therefore both to acquire social standing—though the Government may be despised—and the prospect of economic advance. This tendency is emphasized by the fact that the English school system has been applied to India, with the result that it does not produce the kind of people who would easily fit in with the needs of their own country. 'For the products of the modern school system there seem to be no other openings than to go on to the university and to hazard everything for the sake of a government job, and in the case of failure to find a position in one of the professions, such as law or teaching. This is the result of the fact that in the high-school stage no other channels of employment present themselves into which the student may go.'

Thus, whether in Europe or in the East, political constellations leave their imprint upon the institutions of higher learning. It would be easy to prolong the list of political influences on the university situation, such as the imposed abolition of compulsory military service in Germany from 1919 until 1935, which drove many young people into academic careers who might otherwise have become officers. However, it happens so often that these political influences reflect national situations that specific generalizations cannot be attempted. In so far as they are fundamental they are mostly only the outward expression of a change in social concepts, of movements of ideas which will be dealt with in the next section.

IV. SOCIAL CONCEPTS AND NATIONAL ATTITUDES

The great economic development dating from the industrial revolution has been accompanied by the growth of new social concepts. Chief amongst them is the idea of the equality of man. It is not a new idea. It became a political reality in the French

Revolution, though for all practical purposes it served at that time only to establish long-coveted rights of the *bourgeoisie*. Only in the later stages of the industrial revolution was this notion extended to the lower classes. Gradually it is leading to the emancipation of these classes as well as of women. Both assert amongst other things their right to better education. The recognition of their claims comes very slowly. The share of the working classes in higher education is even to-day in no relation to their numerical strength.

This general trend is modified from country to country by different national attitudes. In some countries, such as the United States and Japan, democratic ideas have resulted in a rapid extension of secondary and university education even before economic conditions would lead one to anticipate such a development. In other countries, for instance in England and in France, the process has been retarded by a strong traditionalism or by an interpretation of the task of higher education which militates against the admission of large numbers. Those who are obsessed by the idea that economic forces, and economic forces only, are moulding the world will find a rich field for meditation in an analysis of the interplay of economic fact, social concept, and national attitude.

The educational emancipation of the lower classes

The *United States* offer the most striking example of the powerful influence of social and political ideals upon education. Protestant individualism, which lost its exclusiveness in the fire of the common struggle on the 'frontier', asserted the equal rights of all individuals, and found its expression not only in the political system of the country but in a very serious and on the whole effective effort to open up educational facilities to all and sundry. Through education the American dream of an ever-expanding life was to come true. 'Equality of opportunity' became the keynote of American education.

The comparative wealth of the country did the rest—though many of the American students are very much poorer than the average European student. They are helped, of course, by prevalent social concepts: they are encouraged to 'work their way through college'. Similar ideas which originated in Europe only after the War encounter a great deal of prejudice on the part of the students, the general public, and the university authorities. In America it

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has at all times been considered a sign of pluck rather than a stigma to earn one's own living as a student. In 1927-8, at the height of prosperity, 49 per cent. of the men students and 26 per cent. of the women were at least partially self-supporting, and 22 per cent. of the men and 14 per cent. of the women earned their entire way through college by part-time work.¹

With these ideas as driving forces within a great nation, it is not surprising that more than 50 per cent. of all adolescents between 15 and 18 are in secondary schools, and every seventh person—as has been mentioned—of college age is actually in college. The total enrolment in American schools and colleges is 33,000,000, taught by more than a million teachers. These staggering figures can only be understood in terms of American social philosophy, which has led four States to raise the school-leaving age to 18, five to 17, thirty-one to 16, and only eight to 14 or 15, i.e. the average European school-leaving age. It is also altogether in keeping with the American tradition that President Franklin D. Roosevelt, in his Baltimore Address on April 13, 1936, suggested that the school-leaving age throughout the country should be raised to 18.

Statistics about the social origin of American students are unfortunately very inadequate.² The survey of sixty-five liberal arts colleges and universities by O. Edgar Reynolds reveals that the largest group of students (34.42 per cent.) is made up of children of proprietors and managers, that 18.35 per cent. came from the families of professional men, while the fathers of 23.31 per cent. were engaged in agriculture. At the other end of the scale we find that 7.27 per cent. of the students' fathers were engaged in skilled trades, while only 0.50 per cent. were common labourers.³ The only valid conclusion to be drawn from these data is that the families in the lower income groups have a comparatively small share in higher education, a conclusion which will surprise no one.

¹ Walter J. Greenleaf, 'Self-Supporting College Students', in *Vox Studentium*, vol. vi, Oct.-Dec. 1929, pp. 175 ff. Also idem, *Self-Help for College Students*, United States Department of the Interior, Bureau of Education Bulletin (1929), No. 2.

² A well-documented study of the social origins of secondary school pupils in America can be found in George S. Counts, *The Selective Character of American Secondary Education*, in Supplementary Educational Monographs, No. 19, May 1922, published by the University of Chicago.

³ O. Edgar Reynolds, *The Social and Economic Status of College Students*, New York, 1927, p. 14.

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On the other hand Reynolds reports that only 28.06 per cent. of the students' fathers had attended college themselves, while 33.16 per cent. did not even have a high-school education,¹ which shows that the educational emancipation has made great progress within one generation, even though it has not fully reached the lower income groups. The latter too, however, are making strenuous efforts to give their children a higher education. This is proved by the fact that they are strongly represented in the teachers' colleges and normal schools—usually, as has been pointed out, the first step on the road to higher education. This is clear from a table we owe to William C. Bagley on the distribution of normal-school and college students according to parental occupation.² The differences in the social origin of college and normal-school students are so striking that we reproduce this table without further comment.

TABLE VI. *Distribution of normal-school and college students (United States) according to parental occupation*

Occupations of students' fathers	3 Louisiana teachers' colleges	9 Massachusetts normal schools	3 Connecticut normal schools	19 Pennsylvania normal schools	4 Michigan normal schools	65 liberal arts colleges
	Per cent.	Per cent	Per cent.	Per cent.	Per cent.	Per cent.
Business	23.4	29.7	27.0	21.3	..	44.4
Skilled labour	10.4	39.8	47.0	33.2	..	7.2
Unskilled labour	5.0	11.4	..	14.0	..	0.5
Farmers	34.2	7.6	8.0	18.7	33.5	24.2
Professions	6.9	5.7	5.0	9.9	6.7	18.5

The democratization of higher education in Europe has been very much slower than in America. Democratic ideas have found barren ground in most countries on the Continent. Numerous are those Europeans who, inspired by liberal and egalitarian ideas, have had to seek refuge in the United States. While America, strong in her democratic traditions, was widening her geographical and economic as well as her educational frontiers, Europe was still struggling for constitutional government and the establishment of individual rights, including the right to education.

¹ Ibid., p. 40.

² William C. Bagley, 'The Problem of Teacher Training in the United States' *Educational Yearbook of the International Institute of Teachers College*, 1927, New York, 1928, p. 584.

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Until late in the nineteenth century European society was governed by the concepts of caste and class. Arts and crafts guilds and unions continued their hold over their members, officers and the landed gentry had their own codes of life, trade and commerce were organized on professional lines, and the liberal professions were to a considerable extent hereditary. The upper classes developed a *Standesbewusstsein*, a consciousness of their high social position which made them exclusive. All these distinctions and differences rendered any social metabolism very difficult. It needed exceptional gifts and energy to pass from one class to another.

It was only in the advanced stages of the industrial revolution that these outworn forms of society broke down, though certain castes, for instance officers and the landed gentry, have in some countries managed to preserve their privileged social position and their exclusive attitude well into the twentieth century. The earlier stages of the industrial revolution, with its epic struggle of large masses of the population for a bare minimum of existence, brought purely economic considerations into the foreground. The old order of feudal lords, of guilds and castes, was found wanting, contrary to economic reason and an impediment to industrial development. Personal initiative and inventiveness led both to the meteoric rise of individuals and to a gradual improvement of the standard of living. As the sciences contributed to the advance of the machine age, the desire for more knowledge grew: 'Knowledge is power.' All these elements combined to make higher education appear more desirable and—with increasing wealth and the breaking down of old barriers—more easily attainable, as has been pointed out before.

It is highly significant that student enrolments in *Germany*, which was to be one of the first industrial countries on the European continent, remained practically stationary from 1825 until 1870, increasing only from 12,000 to 13,000. Between 1870 and 1914 they rose (in universities only) to 63,000.¹ The war of 1870–1 had, according to the opinion of the time, been won by the German schoolmaster, the herald of a new age in which improved knowledge meant great political and economic power. The outcome of the war cemented the final victory of the industrial revolution. New capital initiated a period of industrial development—particularly after the periodic

¹ Reinhold Schairer, *loc. cit.*, p. 14.

depression ending in the early nineties—which offered ever new opportunities to those who had the knowledge which is power. No wonder that from that time onwards it became the dream of every self-respecting parent to give his children the best possible education.

The new middle classes were the first to benefit. During the period 1835–40 the families of successful men *in commerce, banking, and industry, i.e. the families most closely related to the economic advance, were represented in the universities by 3·67 per cent. of all the students. In 1871–6 their share in higher education had increased only to 6·88 per cent. of the total student enrolment. It reached 13·49 per cent. in 1901–6; 14·35 per cent. during 1906–11; and 22·1 per cent. in 1924–5.¹ Other groups followed more slowly. Unfortunately it is impossible to give a clear idea of their educational development, as the earlier German statistics bring together heterogeneous occupational groups. Thus craftsmen, who before the industrial revolution held a privileged position and had a considerable share in student enrolments, appear together with 'workers', whose children were practically excluded from higher education. The figures given are inconclusive, as the losses of the one group are compensated by the gains of the other. The more recent university statistics indicate, however, the extent to which the lower classes have penetrated into the universities. In 1930 31·7 per cent. of the students belonged to the upper classes (including ranking officials and superior officers, professional people with academic training, big landowners, proprietors and directors of factories, business executives); 60·7 per cent. to the middle classes (including officials of middle rank, professional people without academic training, small landowners, independent craftsmen, small shop-keepers, private employers); and 5·8 per cent. to the lower classes (including state and private employees in inferior positions and industrial and agricultural workers).² Only

¹ *Sozialer Auf- und Abstieg im Deutschen Volk*, Heft 117 der *Beiträge zur Statistik Bayerns*, Munich, 1930, p. 32. The abundant documentation contained in this publication fully supports our line of reasoning, as shown in one of its main conclusions: 'Zeitlich ist eine zunehmende Tendenz des Klassenwechsels unverkennbar. Der Grund hiefür liegt darin, dass heute vorwiegend wirtschaftliche Faktoren die Klassenbildung beeinflussen und die früher die Klassenzugehörigkeit bestimmenden Momente wie ständische Gebundenheit, die Bestimmung von Beruf und sozialer Stellung durch Tradition oder Rechtsatzung immer mehr zurücktreten' (pp. 126–7).

² *Deutsche Hochschulstatistik*, vol. 5, Berlin, 1930, p. 72.

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21.3 per cent. of the parents of students had themselves a university degree. Of the lower officials or officials of middle rank who provided 28.3 per cent. of the total number of students, only one per cent. had completed a university education. No further proof is needed that the educational emancipation in Germany, though it has not fully reached the working classes, is in an advanced state and that the increase in student enrolments is largely due to the influx of new elements into the institutions of higher learning. The last few years have seen marked changes in the composition of the German student body which are due to state interference, and which as such will have to be treated in a later section.

The fact that the extension of higher education to new classes in Germany coincided with a period of great economic prosperity might suggest that after all purely economic factors rather than the appearance of new social concepts are at the basis of the growing urge for higher education. *England*, however, shows that social concepts and national attitudes may at times be stronger than economic factors. Higher education in England, the home of the industrial revolution, developed very much more slowly than in Germany. There were only four universities in England before 1880—Oxford, Cambridge, London, and Durham. The other seven universities of England are of more recent date.¹ Speaking of the modern universities, the Report of the Universities Grants Committee for 1929-30 to 1934-5² remarks: 'It is their special duty and their pride, as it has long been the pride of the Scottish Universities, to bring University education within reach of the poor scholar.' A highly developed system of grants has helped to achieve this end. Out of the total student body 20,518 students or 41.7 per cent. were in receipt of some assistance in 1934-5, and the poor student is a much more frequent phenomenon in England than in Germany. In this sense higher education in England has certainly been democratized. It has, however, not been generalized to anything like the same extent as in Germany or other continental countries. Certain strains in British character have weakened or offset the effects of the industrial revolution upon the expansion of education.

This is not the place to analyse British character, but it needs no

¹ Ernest Barker, 'Universities in Great Britain', in *The University in a Changing World*, London, 1932, p. 102.

² *Loc. cit.*, p. 12.

detailed analysis to realize that the English, in comparison with the Germans until Hitler, are much less 'intellectual', which is no slight on their intelligence. They learn by living and they live by action. In England, too, there is a certain loosening up in the rigid framework of the social structure as a result of the industrial revolution, the passing from one class to another becomes easier, but the best energies of the masses pour into business rather than into the universities. Business and industry educate their own leaders. It is only in recent decades that, owing to the increasing complexity of modern life, which renders purely empirical methods in economic enterprise more difficult, a need has made itself felt there for the systematically trained product of the universities.

A further element in the situation is the strong sense of tradition in the English. The old forms in which English life is embedded have shown an extraordinary degree of resistance to the disintegrating influence of modern economic development. Thus many of the professions have not only maintained their time-honoured customs and constitutions¹ but they continue to recruit themselves to a greater or lesser extent from amongst candidates without a university training.

Finally, the universities themselves have held out for a long time against the invasion of their sacred halls by seekers after 'utilitarian' knowledge. For a long time the sciences were not considered subjects to be taught in the universities. H. T. Tizard, Rector of the Imperial College of Science, in an address to the British Association on September 6, 1934, characterized admirably this attitude of the universities:

'I was at a public school at a time when to take an interest in science was held to be a sign that you were not quite a gentleman. At my school there were "close" scholarships to Oxford and Cambridge, but I was soon given to understand that these were not available for boys on the science side. They were made available soon after I left, at about the time when baths were first installed in college—an interesting coincidence of sanity and sanitation. It does not seem very long ago to me; yet the changes that have taken place since then are so profound

¹ Sir Frederick Pollock in his *Essays in the Law* (1922), p. 134, speaks of the constitutions of the four Inns of Court as 'a survival of medieval republican oligarchy, the purest, I should think, to be found in Europe' (cit. A. M. Carr-Saunders and P. A. Wilson, *The Professions*, p. 7).

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that it is now considered quite respectable to be a scientist, even at a public school.^{1, 2}

If any conclusions are to be drawn from these general observations on England it may be assumed that the numerical progress of higher education in England will remain slow, but that increasingly all strata of English society will participate in it. This situation reflects the extraordinary stability of English life.

Before leaving Great Britain it should be pointed out that while there were in 1934-5 1,013 inhabitants to each full-time student in an English university, there were 741 inhabitants per student in Wales and 473 in Scotland.³ Nothing could show better the importance of differences in national attitude. The three countries have had a common history for several hundred years and yet Scotland's interest in higher education—if we may express it in figures—is nearly three times as intense as England's. The Scotsman appreciates general ideas, learning to him is a purpose in itself, much more than to the Englishman. Unlike the majority of the English universities the four Scottish Universities were founded centuries ago (Glasgow, St. Andrews, and Aberdeen in the course of the fifteenth century; Edinburgh towards the close of the sixteenth century). Graduates of the Scottish universities have not only added zest to the political and intellectual life of England but are to be found throughout the English-speaking world.⁴

¹ Quoted from *Daily Telegraph*, London, Sept. 7, 1934.

² The English Public School is of course not to be confused with the American. The term 'Public School' began to be used in the eighteenth century for a number of grammar schools which were non-local in character and drew their pupils from a wide area (cf. I. L. Kandel, *History of Secondary Education*, p. 290). In other words, they were boarding-schools which on the whole served the wealthy classes. For centuries they held the key-position in the field of secondary education in England. To them primarily fell the task of producing an educated class, an aristocracy of character and mind. In spite of periods of low standing and marked disintegration it was the public school which, hand in hand with the English Church, created English culture and produced leadership for the nation. The graduate of the public schools often, though by no means always, proceeded to Oxford or Cambridge. With the growth of publicly supported secondary education and the emergence of the new universities this tradition is weakening.

³ University Grants Committee, loc. cit., p. 28.

⁴ It was no accident of history that a Scot, Andrew Carnegie, established some of the largest and most progressive educational foundations in the world. Amongst other things it is due to him that no gifted Scottish youth needs to forgo the advantage of a higher education simply because he is impecunious. The large student enrolments in Scotland, while prompted by the Scotsman's innate desire for learning, have been made possible by the Carnegie Trust for

Again there are few countries which equal Wales in their desire for ever more education in spite of appalling poverty. A large section of the students at Cardiff come from impoverished miners' families suffering from prolonged unemployment. The Welsh mind has been shaped by the same protestantism which found a supreme embodiment in the educational fervour of the United States.

No statistical data are available about the social origin of students in *France*. We have to be satisfied, therefore, with certain general indications. In France as in England it is a characteristic national attitude which has caused the numerical development of higher education to be slow. Quite opposite attitudes have led to the same results. While the 'anti-intellectual' attitude in England has kept the young people out of the institutions of higher learning, we find that in France an over-emphasis on intellectual culture has kept student enrolments at a low level for a long time. France is the true heir to the treasures of the ancient civilizations of Rome and Greece. They are at the basis of scholasticism and humanism, which reached their highest expression in France. And they continue to mould French thought. The treasures are guarded by the high priests of learning, those who devote their lives to the understanding and the cultivation of the classical tradition. The universities belong to them, and even on the secondary level they are educated in separate schools—the *lycées* and the *collèges*. The toilers have to be satisfied with a lesser education, the *écoles primaires* and *écoles primaires supérieures* which educate for the ordinary tasks of man. This attitude is not necessarily anti-democratic. By a system of selection which goes back to Napoleon a few exceptionally gifted children of the poorer classes have always been enabled to avail themselves of a university education. On the whole, however, higher education has remained the privilege of the well-to-do families which could afford the costly schooling in *lycées* and *collèges*.

Nevertheless, in the long run these exclusive ideas of higher learning have not been able to withstand the onslaught of new social concepts. The reform of 1896 decentralized university life and led to the creation of seventeen universities, thus bringing university education geographically within easier reach. The

the Universities of Scotland which provides the tuition-fees and scholarships for needy Scottish students. (Cf. *Centenary of the Birth of Andrew Carnegie, the British Trusts and their Work*, Edinburgh, 1935.)

reform of 1902 opened up the universities to some of those who had neither Latin nor Greek. And the reforms beginning with the year 1925 established the *école unique* which tends gradually to drop the old distinctions between the two types of secondary schools and above all establishes the principle of free secondary education. Since 1929 fees in secondary schools have been gradually abolished, while at the same time the number of state-scholarships (*bourses nationales*) for university students has been increased. The growth in student enrolment corresponds to these reforms. The total number of university students has augmented rapidly—1890: 16,581; 1900: 29,377; 1910: 41,044; 1920: 44,938; 1930: 73,601; and 1934: 87,152. There can be no doubt, in the light of the essential characteristics and purpose of the educational reforms, that a growing section of the students come from families hitherto excluded from higher education.

The reforms were hotly opposed by some of the most outstanding French thinkers. In the words of C. Bouglé: '... it is fear of the mortal danger run by that humanism which is the very strength and grace of French culture that incites some of the best minds to resist all efforts at opening university studies to the largest possible number of gifted children from the lower classes.'¹ This opposition delayed the reforms but it could not prevent them. The fear which prompted it is not unfounded—as long as no sufficient measures are taken at the beginning of secondary education to select those who, irrespective of wealth and family connexions, are qualified to become the guardians of French civilization.

Japan offers the example of a country where new social and political ideas breaking in from the western world precede fundamental changes in the educational and the economic system. Education has always been highly valued in Japan. Yet until the régime of the great Emperor Meiji class-distinctions were strict, and unless of the Samurai class a child had little chance of being admitted to a school of high repute. A recent publication by the Japanese Department of Education² describes the further development:

'The far-sighted Emperor Meiji, who accomplished the great work of the Restoration, adopted the policy of increasing national prosperity

¹ C. Bouglé, 'The French Conception of the University', in *The University, in a Changing World*, London, 1932, p. 41.

² *A General Survey of Education in Japan*, published by the Department of Education, Tokyo, 1933.

by giving up antiquated practices and acquiring knowledge from the whole world. For the pursuance of this policy great importance was placed upon education. In 1868 an educational officer was appointed, followed by the establishment of various schools. Three years later the Department of Education was instituted for the control of the educational affairs of the whole country. In 1872 a Code of Education, modelled on the French system, was issued. . . . In an Imperial Rescript issued in those days we find the following words: "Henceforth education shall be so diffused that there shall be no ignorant family in the land and no family with an ignorant member." . . . "As to higher education, it is left to the intellectual capacity of each individual." . . .

These measures did not remain on paper. Very wisely the educational efforts of the Government were concentrated not so much on the development of higher education as on the gradual building up of a well-balanced system of education for every one—a great contrast with India, where only university education is under national legislation. As a result Japan ranks to-day, with 0.52 illiterates per hundred, third lowest amongst the nations of the world, Germany and Great Britain having 0.03 and 0.35 respectively. University education grew more slowly. There were only five universities in 1919, with 8,020 students, and beside them a multitude of higher professional and vocational schools.

The third period in Japanese education of modern times begins after the War. It is, properly speaking, the period of higher education. As has already been pointed out in the first chapter, the number of universities was increased from 5 to 46 and student enrolments increased at a stupendous rate. Economic prosperity and rapid industrial development undoubtedly had their share in this increase, but it reflects also the final victory of western ideas over outlived social concepts. Mitsuaki Kakehi, Professor at Waseda University, writes:

'When we remember the great prosperity Japan was enjoying at the end of the War, possessing gold amounting to Yen 2,180,000,000 at the end of 1920, we are easily led to conclude that economic prosperity is one of the most important factors in bringing about such an extension of higher education. Yet while economic prosperity made it possible to carry out the programme, the spirit of the new world, liberalism, individualism and democracy, played the more important part in creating a general sentiment favourable to such a drastic extension.'¹

¹ From a report to the author by Prof. Mitsuaki Kakehi, the chief Japanese collaborator in our inquiry.

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We have dealt at some length with the situation in the United States of America, in England, France, and Germany, and finally in Japan because it demonstrates—convincingly, we believe—the powerful influence of modern social concepts upon the development of higher education. Modified as they may be from country to country by national attitudes, these concepts have led to a certain democratization of the colleges and universities. New classes have been admitted to the institutions of higher learning and have swelled the student ranks. A short summary of reports received from other European countries will serve to confirm the argument.

Bulgaria. Miss Tatiana Kirkova, our chief collaborator in Bulgaria, after describing the new opportunities opening up before the country after the liberation from the Turks, which resulted in a vast expansion of higher education, continues as follows: "This movement (towards the universities, *Ed.*) has been encouraged and facilitated by the democratic spirit in which education has been organized in Bulgaria from the start. The single school system which was adopted from the beginning made higher studies accessible to any gifted child finishing a secondary school. In this way the universities are open to all social classes and groups. The simple economic structure of the country and the low cost of living during the first period after the liberation enabled those coming from the land to enter the university, where they were found in considerable numbers. Not infrequently one or two sons of a peasant family were studying. Unemployment or at best the small income to be expected under present circumstances by graduates have not diminished the urge towards higher education in spite of the fact that to send a child to the university demands heavy sacrifices from the family."

Finland. The Finnish university statistics furnish, according to Vincenzo Castrilli, indications concerning the professions of the fathers of the students at the University of Helsinki during the last half-century. They demonstrate a considerable gain on the part of the lower classes. In 1867 53 per cent. of the students belonged to the families of high officials, teachers in universities and secondary schools, clergy, doctors, and army officers. Their proportion has decreased steadily to 22 per cent. at the present time. The percentage of children of primary-school teachers, artisans, small shop-keepers, non-commissioned officers, peasants, industrial workers, and sailors has increased very considerably during the same period.

Greece. Professor A. Svolos, our correspondent for Greece, emphasizes as one of the chief causes of the invasion of the universities the desire of the urban middle and peasant classes to escape from an

economic situation which is difficult and a social position which is unsatisfactory. According to him 30 per cent. of the students (1932) come from peasants' families; business: 24.4 per cent.; industrialists: 7 per cent.; liberal professions: 18 per cent.; officials: 13 per cent.; people with private incomes: 2.8 per cent.; others: 4.8 per cent.

Hungary. Désiré de Laky shows in his study *Statistiques des étudiants des universités hongroises*¹ that during the year 1913-14 the fathers of 5.8 per cent. of the students were big or medium landowners and that this number fell by 1929-30 to 2.2 per cent. During the same period the number of students of the class of small peasants and agricultural labourers grew from 0.7 to 1.2 per cent. In the same way the number of students from the families of the owners and managing directors of mines and factories dropped from 11.4 per cent. in 1913-14 to 10.4 per cent. in 1929-30, while the number of students from the workers' families grew from 1.7 to 3 per cent. The upper classes in commerce, transport, and banks were represented by the proportions 12.7 and 5.8 per cent. respectively in the years mentioned, while the proportion from the lower classes only decreased from 2.6 to 2.2 per cent. Only 30.6 per cent. of the students in 1929-30 came from families where the father had a university degree.

Another Hungarian expert, Aladár Haász, for several years chief of section in the Ministry of Education, comments on these figures in the following terms:²

'The growing desire of the lower strata of society to rise in the social scale began to be felt before the War. The interest in higher education increased throughout the nation. Yet very many among the masses of students frequenting the university at present would never have given a thought to higher education in pre-War days. . . . The World War, in spite of its horrors, had in many respects a levelling effect upon class differences. Its democratizing influence played a big role in facilitating the rise of the lower classes. All who had had a glance into the conditions of living of the intellectual strata were determined with unbending energy to conquer similar conditions for themselves and their children. . . . Certainly, there are people who, coming from the lowest strata of society, have by their special gifts become outstanding representatives of science or art. Who, however, dares to hope that the masses which encumber the universities to-day are characterized by exceptional talent and by a thirst for more knowledge? Most of them are inspired by the desire to rise in the social scale and the illusion of more lucrative

¹ Désiré de Laky, *Statistiques des étudiants des universités hongroises en 1930*, Budapest, 1932, pp. 39 ff.

² Aladár Haász, *Die Überfüllung der Hochschulen*, Bericht über Ungarn zur Vorbereitung der Expertentagung des Weltstudentenwerks in Genf, 20.-22. Sept. 1933, pp. 10 ff. (mimeographed report).

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gain. It is significant that the children of agricultural labourers rarely frequent agricultural colleges. . . . Their aspirations centre on the professions year after year. Large numbers of poor peasants' children leave home only to find after they have acquired their degree that there are no positions for them. In spite of this development the great majority of students is still recruited from the intellectual classes themselves, which, deprived of their inherited fortune or their savings by the War and its aftermath, are obsessed by the idea of ensuring the future of their children by giving them a higher education.¹

Italy. Of all the continental European countries under consideration Italy has the smallest proportion of students in relation to the total population.² No official statistics for the whole country concerning the social origins of the students are available. Vincenzo Castrilli in a communication to the *Società per il Progresso delle Scienze* in 1933 comes to the conclusion that 40 per cent. of the students before the War came from families of intellectuals with a university degree. According to Giorgio del Vecchio³ this proportion has probably increased if anything since the War. It appears, therefore, that the share in higher education of the lower or less educated classes in Italy is smaller than in other countries. The industrialization of Italy proceeded slowly before the War and this factor, together with the prevalence of conservative social concepts, vested in the Roman Catholic traditions of the country, militated against the educational emancipation of the lower classes. After the War the Fascist conception of society with its corporative ideals meant in a sense a return to earlier forms of social life, the period of self-governing guilds and trade organizations—a form which, it has been shown, is not conducive to an expansion of higher education. Furthermore, Fascism emphasized the social and national importance of manual work, even in its humblest forms, rather than the element of individual gain. Individual effort was to be judged not by the benefits it might bring to the individual but by its social usefulness. Gentile's educational reform, initiated by the law of May 6, 1923, and inspired by these ideas, strengthened the vocational element in the secondary schools, thus diverting many young people from the universities. In the Italy of to-day 48 per cent. of the children in secondary schools frequent vocational schools leading directly to practical occupations.⁴

*Norway.*⁴ Student enrolments in Norway before the War, compared with the total population of the country, were below the average of the other Scandinavian countries. Since then the increase in student enrolments has been more rapid than, for instance, in Sweden or in

¹ See Table II, p. 17.

² Loc. cit., pp. 11 ff.

³ Giorgio del Vecchio and Paola Maria Arcari, loc. cit., pp. 22 and 23.

⁴ This paragraph is partly based upon a report by Actuary H. Palmstrom, the chief Norwegian collaborator in the earlier stages of our inquiry.

Denmark, with the result that they are now somewhat higher—always in relation to the population—than in Denmark and slightly lower than in Sweden. The low figures for the period before the War can be explained by the peculiar social and economic structure of Norway and certain typical Norwegian attitudes. About half of the Norwegian population is engaged in agriculture. The Norwegian peasant is very independent in outlook. Strong in his own pride he successfully resisted city influences for a long time. There is also a large working-class section in the country, but Norway is conspicuous by its small urban middle class, which in most countries is the chief supporter and beneficiary of higher education. There have been no radical changes in this social structure since 1913. The changes which have taken place are rather changes in emphasis. The city becomes more important. The emancipation of the working classes has made considerable progress—Norway has now for several years had a socialist government—with the result that these classes have considerably increased their share in higher education. Other groups which show notable gains are travelling salesmen, civil engineers and technicians, and the managerial group. These increases reflect the growing complexity of economic life. Greater demands are put upon men in industry and commerce—though their number does not necessarily increase—which leads them to a keener appreciation of the benefits of a higher education for their children.

Switzerland. It may be ascribed to the decentralization of education in Switzerland and the strong individualism of the Swiss, which does not facilitate statistical surveys requiring personal data, that no statistics or studies are available concerning the social origin of Swiss students. All we can gather from the official statistics is that the number of young people of college age who are actually in an institution of higher learning has grown considerably. According to the Swiss university statistics,¹ 18 out of 1,000 young people between 20 and 24 years of age attended an institution of higher learning in 1888. Their number increased to 22 in 1900, 32 in 1910, 42 in 1920, and 45 in 1934. From personal observation it can be concluded that the urban middle classes, which are strong in Switzerland, were the first to have benefited by this increase.

In spite of the inadequacy of statistics and the natural limitations of statistical methods, we hope to have produced sufficient indication, if not proof, of the truth of our initial statement that social concepts and philosophies, influenced and modified as they are by national attitudes, have a direct bearing upon the numerical growth of universities and colleges. New social concepts have helped to open up higher education to the children of the lower

¹ *Schweizerische Hochschulstatistik, 1890-1935*, Bern, 1933, p. 17.

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classes—'lower' both from an economic and an educational point of view. Higher education is becoming 'democratized'. This expression must, however, be taken with a large grain of salt. Not only does the degree of democratization vary considerably from country to country, but with the possible exception¹ of the United States it is still in a rudimentary stage. It is not the industrial or agricultural labouring classes which have gained primarily by the process of democratization, in spite of the fact that they constitute the overwhelming majority of the population of most of the western countries and of Japan. They are still only very sporadically represented amongst the students. Their emancipation takes the form of a gradual rise into the lower middle classes, which above all other groups have increased their share in higher education.

Whether this trend towards the democratization of higher learning will persist and whether it must necessarily result in increased student enrolments is a matter which will have to be discussed at a later stage of our report when we shall deal with the endeavour to avoid 'overcrowding' of the universities.

The educational emancipation of women

The most frequently quoted reason for the overcrowding of the universities is the increase in the number of women students. This increase is indeed remarkable and testifies to the degree of feminine emancipation achieved within the last fifty to sixty years. Even towards the end of the last century women could only rarely be seen in the sacred halls of the universities. The Anglo-Saxon countries were the first to recognize the right of women to higher education, though Oxford began to confer degrees upon them only after the World War, while Cambridge still keeps them on the fringe of the university. The continental European countries followed but slowly. For them the word of Montaigne continued to remain a guiding light and a welcome source of inspiration: 'La plus utile et honorable science et occupation d'une mère de famille, c'est la science du ménage.' In educationally far advanced countries such as Germany and France only 5.5 and 9.3 per cent.

¹ The U.S.S.R. are, of course, altogether exceptional. According to Klaus Mehnert (*Die Jugend in Sowjetrussland*, Berlin, 1932, pp. 29 ff.) the student body in the U.S.S.R. was in 1929-30 composed as follows: 30.2 per cent. of the students belonged to the industrial labouring class, 26.3 per cent. to the peasantry, 37.3 per cent. to the group of employees, and 5.8 per cent. to other groups.

respectively of the matriculated students in 1913 belonged to the 'weaker sex'.

As in so many other fields the War brought fundamental changes in this respect. Women were all of a sudden in demand in all kinds of occupations and professions. They had to fill executive posts temporarily vacated by the men who had gone to the front, they accomplished work in the munition factories and in heavy industries which had hitherto been considered too strenuous for women, they tilled the land and they kept the wheels of transport going. It was a tremendous test well met, which did away with many prejudices about the ability of women to do responsible work outside the narrow precincts of family life. And it greatly helped to establish equal rights for women, including the right to higher education. The curve of enrolments of women in universities rose sharply.

Yet those who at present assert that all the ills of the universities are due to the invasion of women, who clamour for laws for the restriction of the study of women, are obviously guided by resentment and exaggerated fears of competition rather than by a dispassionate consideration of facts. These facts are given in Table VII, which shows the enrolment of women students before the War and in 1934 for a selected number of countries, large and small, agricultural and industrial. It gives the proportion of women students to total enrolments before and after the War, and

TABLE VII. *A few examples of the increase of women students*

Number of women students in 1913 and 1934, in relation to total enrolments and increase in percentage of 1934 over 1913 (1913 = 100)

Country	1913			1934			Increase of women students 1913-34 (1913 = 100)	Increase of total enrolments ¹ 1913-34 (1913 = 100)
	Total	Women	Women in percentage of total enrolments	Total	Women	Women in percentage of total enrolments		
	1	2	3	4	5	6		
Austria	18,129	564	3.1	19,297	3,748	19.4	664.5	106.5
Denmark	2,707	179	6.6	5,405	1,276	23.6	774.3	199.7
Estonia	1,842 ²	375 ²	20.4 ²	3,366	914	27.2	243.7	182.8
France	41,044 ³	3,830 ³	9.3 ³	87,152	23,465	26.9	612.7	212.3
Germany	76,847	4,243	5.5	106,764	15,501	14.5	365.3	138.9
Great Britain	27,728	5,654	20.4	50,638	12,232	24.2	216.4	182.6
Holland	5,568	654	11.8	13,683	3,340	17.1	357.8	245.7
Hungary	18,238	475	2.6	15,659	2,176	13.9	456.2	85.8
Italy	28,026	1,634	5.8	51,003	6,115	12.9	374.4	181.9
U.S.A.	332,696 ³	104,701 ³	31.5 ³	689,757 ⁴	372,914 ⁴	37.7 ⁴	356.2	297.5

(1) Compare Table I, p. 13.

(2) 1920.

(3) 1910.

(4) 1932.

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a comparison of the increase in total enrolments and in enrolments of women.

This table is instructive from more than one point of view. Those who see a danger in the extension of higher education to women will point to columns 7 and 8, which seem to confirm the opinion that the increase in enrolments of women students have been excessive. They certainly have in all cases grown more rapidly than the total enrolments. Beyond this we can learn nothing from these columns. The figures given in columns 3 and 6 are very much more important. They reveal that with the exception of Great Britain and the United States higher studies were the privilege of few women before the War, and that even at present women students provide only slightly above or below 20 per cent. of the total student population. That they have substantially added to student numbers, there can be no doubt. That the increased study of women can, however, only very partially explain the staggering increases in total student enrolments is equally evident.

The usefulness of Table VII is not exhausted by these very general considerations. It contains on the whole conclusive evidence that the development of higher education for women is a result of the evolution of social concepts. The early educational emancipation of women in the *Anglo-Saxon* countries can be traced to the liberal and democratic ideas prevailing in these countries throughout the nineteenth century and into our own day. The history of the suffrage movement in *England* is certainly not a record of smooth progress, but notwithstanding numerous setbacks the movement was bound to be successful in the country of the Magna Charta. *Denmark*, one of the few examples of an enlightened modern democracy on the European Continent, followed suit. The high percentage of women in French universities may seem surprising considering that *France* is one of the few countries which has so far refused to give the vote to women and which, as has been shown in the previous section, has been very reluctant to open the institutions of higher learning to the lower classes. It must, however, not be forgotten that France is the country in which intellectual achievement counts above everything else. The wealthier families, able to support their daughters in the *collèges* and the *lycées* of pre-war days, put these daughters in a position to prove their intellectual acumen, and when it was proved, the French admiration for intellectual ability quickly

conquered existing prejudices. Incidentally, it is to be expected that this educational emancipation will before long lead also to the political emancipation of French women, which has been delayed largely because the left parties were and are afraid of a conservatism on the part of women which to them is born of ignorance. The development in *Austria* and in *Holland* has been slower. There can be little doubt that in Austria it has been delayed both by the economic misery of the country since the War, which makes it extremely difficult for many families to send their daughters as well as their sons to the university, and by the conservatism of the Catholic Church which plays a larger role in Austria than, for instance, in France. Holland too seems to be conservative in the sense that family traditions and strong convictions on the place of women within the family have retarded the development of higher education for them. Holland is, however, not hostile to the studies of women. There is a steady increase in their university enrolments which will probably prove more satisfactory than the mushroom growths in certain other countries.

The large proportion of women in the *Esthonian* institutions of higher learning is of particular interest. It corresponds to a similarly large proportion in the other 'new' countries, whether on the Baltic or in the Balkans. For most of these countries no reliable pre-War figures are available. We find that in 1935 roughly 30 per cent. of the students in *Latvia* were women, 29 per cent. in *Bulgaria*, 26 per cent. in *Romania*. All these countries owe their existence or their present position to the democratic conception of self-determining nations, they arose like the Phoenix from the ashes of foreign empires. In reaction against their own past they embraced with alacrity the western ideas to which they owed their freedom and introduced them into their educational systems. The access both of women and of the lower classes was facilitated. As most of these countries have remained poor they offer a splendid illustration of the force of social concepts and ideas.

The figures for Italy and Hungary are equally revealing. Mention has been made of the conservative social concepts of Italy before the War which militated against the educational emancipation of the lower classes. The same concepts put higher education beyond the reach of most women. The well-known dictum, *Mulier taceat in ecclesia*, applied to the universities as

well as to other walks of life reserved for men. The Fascist régime, while not hostile to the attendance of women at the universities, did not encourage it, as it considered that women should bear children rather than ideas. *Hungary* is perhaps the one country in Europe which has preserved in its purest form the idea of chivalry towards women characteristic of the age of noble lords and warriors. The feudal forms of life which have had to yield in practically all other respects to the infiltration of new ideas and to growing industrialization have been preserved to an extraordinary extent in the Hungarians' attitude to women. It is part of the charm of the country, which captivates every foreign visitor. It is also by no means without its very agreeable side for the women, who are surrounded by old-fashioned demonstrations of solicitude and admiration. But it has the drawback that it definitely puts women 'in their place', which according to these ideas is not within the universities. In spite of all this there are now more than 2,000 women students amongst the roughly 15,000 students in Hungary, which indicates that the traditional ideas have weakened to a considerable extent.

The situation in *Germany* is more complicated. Before the War the old-fashioned ideal of the German housewife resisted the onslaught of the emancipatory efforts of a minority. The German housewife was a symbol not only for Germany but for the rest of the world. Under the Republic the number of women students increased rapidly. It reached more than 22,000 in 1931, and declined slightly to 20,337 in 1932 or approximately 16 per cent. of the total student body. The decline was probably due to the disastrous unemployment of young graduates, which made the studies of women appear even more hopeless than those of men. In spite of the temporary setback it was evident at the time that women were conquering a real place for themselves in the institutions of higher learning. With the accession of Hitler to power the situation changed radically. His cultural and social concepts became law. Germany was to be a heroic country again, a country of soldiers, and the universities, apart from the advancement of knowledge, were to cultivate the new spirit, the virtues of the soldier. All the numerous publications about the new German university published under the national-socialist régime excel in the glorification of the heroic, soldierly, Prussian, regimented spirit with which the Hitler régime has endowed the German

universities and schools. 'There is little or no place for women in such institutions. They are reminded again of the great task for which they were born: to bear children, to be the mothers of an ever more powerful people. As we are only concerned at this point to establish facts, we shall for the moment refrain from comment. The decrease in the number of women students since the arrival of Hitler speaks for the effectiveness of the ideas of the régime: they fell from 20,616 or 15.9 per cent. of the total in 1932, to 18,035 or 15.6 per cent. in 1933, to 15,501 or 14.5 per cent. in 1934, and to 10,506 or 13.6 per cent. in 1935.

Though it would be possible on the basis of available statistics to indicate for a number of countries the distribution of women students over the different faculties, not much would be added to what is already general knowledge. The majority of women students frequent the arts and natural science faculties, preparatory to a teaching career. These are the only faculties where in some countries women outnumber men and in which a possible overcrowding can be traced directly to the appearance of large numbers of women students. At the same time it is well known that the teaching of the young, particularly in the lower grades, is passing more and more into the hands of women. One reason for this is undoubtedly that teaching positions are badly paid in many countries and therefore more easily abandoned by men. Another reason is obviously that women have shown special qualifications for teaching work both in the lower and the higher grades. The next largest group, generally speaking, though not in the United States, are the students of medicine, preparing themselves either for a regular medical career, for pharmaceutical work, or for high-grade nursing. The human element is strong in medicine, which may be one of the reasons why medicine seems to have a strong attraction for women. Law and the social sciences follow only at some distance, though enrolments of women in social science courses have shown a marked increase in those countries which have well-developed systems of social welfare. Germany before Hitler, and America as far as private welfare organizations are concerned, are cases in point. The number of women in technical courses has everywhere remained very small, industrial chemistry being the only exception.

No attempt at completeness has been made in this section. The situation of women and with it their share in higher education

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varies greatly from country to country. The differences are due above all to differences in social and cultural ideas. The emancipation of women, while aided or retarded by economic and technical developments, is above all within the province of the free and conscious action of mankind. As such it is not open to easy generalizations, and the future, at least within one generation, is uncertain.

V. THE SCHOOL AS PREPARATION FOR LIFE

The enumeration of the causes of swelling student enrolments is already too long and yet it is by no means complete. Some of the most powerful forces making for larger student numbers have not yet been mentioned because they are difficult to group under any of the general headings used so far. Chief amongst them are the exaggerated value attributed to a school or college diploma, the faulty organization of secondary schools, and the super-salesmanship of over-zealous educators.

The fetish of diplomas

The emancipation of the lower classes has not in all cases led to an invasion of the universities. The analysis of the situation in England has shown that there are countries which do not consider a higher education the *summum bonum* of human achievement. Yet in the majority of countries it cannot be doubted that the dreams and aspirations of large masses of people turn towards the universities. The motives behind their urge for higher education are not far to seek: the hope for larger incomes, for an easier life by emancipation from manual work, for a better social position, and with some certainly a genuine desire for disinterested learning.

Behind all this is another phenomenon which is of paramount importance. Society has sanctioned and fortified the elevated position of the college graduate by the establishment of a most complicated and meticulous system of credits and diplomas which alone give access to certain positions and occupations. The Germans, who in their thoroughness reached a sorry perfection in this system, coined a special word for it—*Berechtigungswesen*. Rigid rules and programmes determined the extent of schooling necessary to perform this or that function in society. Originating with the stipulation that no one could aspire to an officer's career who had

not passed through a secondary school and acquired the *Abitur*, the cancer gradually spread until it permeated the whole social body. Not only in State and communal administration, but also in private enterprise, a university degree became essential for positions for which no higher learning was required and in which a sound practical training from the bottom up would have been of more use. Paul de Lagarde, one of the greatest German patriots, and Friedrich Nietzsche, as early as the seventies of the last century, waged passionate war upon what threatened to enhance the utilitarian character of higher education at the expense of disinterested learning. Reinhold Schairer in his book¹ *Die akademische Berufsnot* comes to the sad conclusion that their efforts were of no avail: in the early thirties of this century the *Berechtigungswesen* continued to flourish, forcing young people into the universities who had no other qualification for a college education than their desire to obtain a diploma entitling them to some inferior position in a dusty office. He quotes copiously both from Paul de Lagarde and Nietzsche. A particularly telling enumeration of the rights conferred by a secondary school, which suffered as much from the *Berechtigungswesen* as did the universities, is reproduced in the footnote.² Unfortunately it is altogether

¹ Loc. cit., pp. 37 ff.

² The testimonials to be obtained at a Berlin secondary school entitle their holders to the following privileges:

'a. Ein Zeugnis der absolvierten Tertäa befähigt zur Aufnahme in die obere Abteilung der Königlichen Gartner-Lehranstalt zu Potsdam. b. Ein Zeugnis über einen halbjährigen Aufenthalt in Sekunda befähigt zur Annahme für den einjährigen freiwilligen Militärdienst, jedoch nur unter der Bedingung, dass die betreffenden Schüler an dem Unterricht in allen Gegenständen teilgenommen, sich das Pensum der Klasse gut angeeignet und sich gut betragen haben. Ein Sekundaner-Zeugnis befähigt zur Aufnahme in das Königliche Musikinstitut in Berlin. c. Ein Zeugnis der Reife für Prima befähigt die abgehenden Schüler: 1. zum Zivilsupernumerariat bei den Provinzialzivilverwaltungsbehörden, 2. desgleichen zur Annahme als Zivilaspiranten bei den Provinzialämtern, 3. als Zivileleven bei der Königlichen Tierarztschule in Berlin, 4. zum Bureaudienst bei der Bergwerksverwaltung. d. Ein Zeugnis aus Prima ist erforderlich: 1. zur Zulassung zum Zivilsupernumerariat bei den Gerichtsbehörden, 2. zum Studium der Ökonomie auf den Königlichen landwirtschaftlichen Lehranstalten zu Pöppelsdorf und Eldena. e. Ein Zeugnis über einen mindestens halbjährigen Aufenthalt in Prima ist Bedingung der Annahme: 1. zum Supernumerariat bei der Verwaltung der indirekten Steuern und 2. zum Militärintendantendienst. f. Ein Zeugnis über einen einjährigen Aufenthalt in Prima berechtigt zur Zulassung zur Abiturientenprüfung bei einer Provinzialgewerbeschule. g. Die mit dem Zeugnis der Reife versehenen Abiturienten der Realschule erster Ordnung werden zu den höheren Studien: 1. für den Staatsdienst und 2. das Bergfach zugelassen, und wenn sie mit Aussicht auf Avancement in die Armee eintreten

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untranslatable. It shows that most of the rights to be acquired in a secondary school took the form of a permit to proceed to this or that institution of higher learning where the final 'rights' were conferred.

The fetish of diplomas has not been confined to Germany. Similar tendencies can be seen at present in France, where every one wants his *parchemin*, because of the *sanctions*, i.e. the special privileges which go with it. The trend has been greatly accentuated during the last few years of depression, which have increased the competition for available places, particularly in the Civil Service. Giorgio del Vecchio considers this development to be amongst the chief causes of the rush for diplomas to be attained in the institutions of higher learning:

'There is a tendency [as a result of the depression and in Italy also because of the growing importance of the State, *Ed.*] to go in for a career in the civil service, which leads to a desire to acquire ever new degrees on which official advancement and the improvement of one's position depend. It does not make much difference to a business expert in Italy who has a private agency whether he has the title of a doctor of the commercial sciences or simply the qualifications required for an accountant. For a state official, however, the situation is quite different. If he has only the diploma of an accountant he is doomed to remain in the lower grades of the civil service, while with a university degree he has immediate access to positions of responsibility and initiative opening up great possibilities of advancement.'¹

Even America has not been spared a similar development. Graduation from a college has at all times conferred a specially elevated social position upon ambitious young men and women. While with increasing numbers this element is becoming less important, college degrees are more and more required for all kinds of positions. We quote from a manuscript by Professor Willford Isbell King of New York University:²

wollen, 3. von Ablegung der Portepéefährnichtsprüfung dispensiert. Sie werden ausserdem zugelassen: 4. zur Elevenprüfung für die technischen Ämter der Berg-, Hutten- und Salinenverwaltung, 5. zum Eintritt in den Postdienst mit Aussicht auf Beförderung in die höheren Dienststellen, und sind befähigt zur Aufnahme: 6. in die Königliche Forstlehranstalt in Neustadt-Eberswalde, 7. in das reitende Feldjägerkorps, 8. in das Königliche Gewerbeinstitut.' (Paul de Lagarde, *Deutsche Schriften*, Munich, 1924, p. 137.)

¹ Giorgio del Vecchio and Paola Maria Arcari, loc. cit., pp. 8-9.

² Willford Isbell King, *Industrial and Occupational Changes of Six Decades, Continental U.S., 1870-1930* (prepared as a Census monograph).

'The increasing desire for education has also been reinforced by the steadily growing demand on the part of employers that all applicants for positions have suitable training. The result has been that, in those lines in which a knowledge of the "three R's" was formerly considered ample, a high school diploma is now felt to be imperative. Similarly, the young man or woman entering business or industry to-day must show evidence of graduation from college if he is to be considered for the type of position which thirty years ago would have been filled by a graduate of a high school or academy or, indeed, by the boy or girl having merely an elementary school education supplemented by some little experience in business.'

Quotations of this kind could be continued *ad nauseam* from practically every country on earth. They indicate with relentless clarity one of the major trends in modern times: the 'academization' of the preparation for life. Where before there were dozens of channels leading to the highest positions coveted by ordinary men—the workshop, the office, the field, the mine, and many others—there are now only a few channels promising to lead to higher social and economic standing. To the best positions the path of approach is gradually narrowing down to the single one which passes through the college and the university. No wonder that that path is getting congested, that it is taken by people who have not the mental equipment to proceed along it without serious difficulties to themselves and to those who attempt to help them, their fellow students and their teachers.

Most of the results of this system are highly undesirable. Apart from cluttering up the institutions of higher learning with students who are frequently incompetent, it leads to individual failures which could easily be avoided. There are many amongst the 'also-graduates' whose bad school records mark them for life, whose failure in higher mathematics, in ancient or modern languages—subjects which by many are rightfully considered to be important elements in the formation of the true intellectual—has sapped their self-confidence. If they had entered a practical occupation at an earlier stage they might have developed more harmoniously, their growth would have been more natural, and without the emphasis on formal schooling they might even have attained positions of leadership.

Worst of all, there is only too often no relation between the courses required for obtaining a diploma and the jobs for which it

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is supposed to qualify. In other words, a great deal of time is wasted on subjects which have little or no bearing upon the jobs for which the students are preparing. In order to meet this situation colleges and universities have included numerous courses in their curricula which are purely vocational and foreign to the character of higher education. The inclusion of such courses has resulted in a lowering of the educational standard in many institutions of higher learning; of this more will have to be said in the next chapter.

Finally, it is not the least of evils that the possession of a diploma makes the student think he has the *right* to demand a job. Where no 'suitable' jobs are available he is reluctant to go in for jobs for which no diploma is required. Only too often he prefers to curse those in power and to line up with the disgruntled factions, whether of the right or the left, in order to enforce his rights by political means.

The faulty organization of secondary schools

If the college is regarded as the speedway to honour and position, the secondary school is considered to be a road that leads to the single destination of the university.¹ In the earlier days—not so long ago—the secondary school in the same way as the university was open only to the few. It served primarily to prepare young people for the higher grades of education. In Europe at least the type of the classical *Gymnasium* or the *lycée* with Latin and Greek prevailed.² Besides these classical schools there existed a limited

¹ For the purpose of international comparisons it is unfortunately impossible to give a concise definition of the term 'secondary education' which would be acceptable to all countries. The meaning of the term varies widely. In some countries it is extended to all types of post-elementary courses, even though they may be given in evening classes or under conditions (shortness of course, intermittent attendance, &c.) which render their value altogether problematical. In talking of secondary education in this volume we have in mind only those schools which, once entered, require a regular attendance over a number of years, usually extending beyond the compulsory school-leaving age. Concretely speaking we include such institutions as the American high school, the English secondary schools, the German *Gymnasium*, *Realgymnasium*, *Realschule*, *Aufbauschule*, &c., the French *collège* and *lycée*, and those secondary technical schools which provide a training up to the tenth or twelfth grade.

² For a detailed study of the development of secondary education compare the standard work: I. L. Kandel, *History of Secondary Education*, London, 1930. Also: *Annuaire international de l'éducation et de l'enseignement*, published by the International Bureau of Education, Geneva, 1933-.

number of trade schools preparing directly for the exercise of a gainful occupation. They were adequate to meet the demand for a small number of highly trained technicians.

The legitimate demand for more and better education which came with the evolution of democracy and modern technical civilization, combined with the impulse given by the growing importance of diplomas, led to a rapid extension of the secondary-school system. Unfortunately it was not recognized at the same time that the sudden expansion of secondary-school training necessitated far-reaching reforms. What was happening? The schools were entrusted with the preparation for life of large numbers of young people who before had received their training outside the schools. The growing complication of modern society demanded more and better-trained technicians. Yet, instead of new trade schools being opened, additional institutions of the classical type were founded to accommodate the masses of new pupils. These schools continued to prepare for the university and practically nothing else, and they unloaded their students on the institutions of higher learning. The results are only too obvious. In a whole series of countries in eastern Europe, but also in other parts of the Continent and in the Near and Far East, the secondary schools are primarily pumping-stations for the universities. Old *Romania* before the War had 55 secondary schools of the classical type with little over 16,000 pupils. In 1925 it counted 141 such schools with over 57,000 pupils. At that time the country as a whole, including the newly gained provinces, counted 363 *lycées* with 114,000 students as compared with 297 professional schools with only 35,945 students. In other words, the overwhelming majority of the new secondary-school pupils were preparing for a university career. Constantin Kiritzesco, to whom we owe these figures,¹ adds that 'the number of graduates of the *lycées* who do not matriculate in a university is so insignificant that it can be neglected'. Similarly there is in *Greece*, according to the report of A. Svolos, which has been mentioned before, a lack of secondary technical schools preparing their pupils for a vocation, whereas there are too many secondary schools which do nothing but prepare for the university. Professor de Castro of the University of Madrid, our Spanish correspondent, makes the same observation concerning his country.

The situation in *India* is particularly enlightening. The disastrous

¹ *Loc. cit.*, pp. 46 ff.

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unemployment among educated Indians has given rise to the appointment of special government committees of inquiry in many parts of India. Their reports,¹ as well as the reports of the Sadler Commission² and of the Hartog Committee,³ appointed by the Indian Statutory Commission, which are both treasure-houses of information on education in India, are unanimous in stressing the need of vocational training as against the training given in English middle schools, English high schools, and the intermediate colleges, which flood the universities with students who would have been better off with a practical training. The latest and best-documented of the provincial reports, the Report of the Unemployment Committee of the United Provinces, which sat under the Chairmanship of one of India's most outstanding men, Sir Tej Bahadur Sapru—hereafter called the Sapru Report—states the case admirably:

'It is, we think, as true of parents in England as of parents in India to say that the first object which they have in view in educating their children is to enable the latter to earn their livelihood. By the exercise of proper discrimination, it should not be difficult for parents and schoolmasters to see whether a particular boy is suited merely for cultural education or for vocational education. But we do protest against the notion that anybody and everybody, irrespective of his capacity, is fitted to receive education imparted in the university to those preparing for the professions. While, therefore, we should do nothing to discourage those men who are likely to derive benefit by "liberal education" and indeed should help the deserving among them in every way, we should provide for others—and we believe their number is much larger—education of a different type, that is to say, education of a vocational character or such education as may enable

¹ *Report of the Government of Bengal Unemployment Enquiry Committee*, vol. 1, Calcutta, 1924; *A Report on the Question of Unemployment among the Educated Middle Classes in Madras*, Madras, 1927; *Report on an Enquiry into Middle Class Unemployment in the Bombay Presidency*, Bombay, 1927; *A Report on Unemployment in the Punjab*, Lahore, 1928; *Report of the Unemployment Enquiry Committee*, Travancore, 1928; *Report of a Departmental Committee appointed to suggest Solutions for the prevalent Unemployment among the Middle Classes in the United Provinces*, Allahabad, 1930; *Resolution: Proceedings of the Governor in Council acting with his Ministers in the Home (general) Department*, No. 17409, May 19, 1930, Lahore, 1930; *Assam Unemployment Enquiry Committee, An interim Report*, Shillong, 1934; *Report of the Unemployment Committee United Provinces 1935*, Allahabad, 1936.

² *Calcutta University Commission Report*, 5 volumes, with appendixes, London, 1919.

³ *Indian Statutory Commission, Review of Growth of Education in British India*, by the Auxiliary Committee appointed by the Commission, London, 1929

them to earn a decent living independently of Government service, or without being forced by circumstances to join certain learned professions, for which they are either not suited, or which cannot afford to take in any new men in large numbers. In short, our opinion is that education must be brought into line with the needs of the country. There must be some correlation between education and the use that is going to be made of the educated product. We are clearly of the opinion that in future education and employment must be viewed together.¹

The universities themselves have taken a similar attitude. Pandit Madan Mohan Malaviya, Vice-Chancellor of the Benares Hindu University, in a convocation address in 1929 said:

'Where there is no diverting of students to vocational courses, where, generally speaking, every student is forced to adopt one general course which leaves him unfit for anything except clerical training of a poor kind, it is not surprising that universities have been hampered in their work by admitting students who are unfitted by capacity for university education and of whom many would be more likely to succeed in other careers. . . . It is clear therefore that for bringing about much-needed improvement in university standards of admission, teaching and examination . . . a sound system of secondary education with attractive vocational courses must be adopted. This way lies the remedy for the present unsatisfactory state of things and not in the proposals for leaving out in the cold students who are not gifted or have not been fitted by proper school instruction for university education.'²

In March 1934 the Third Quinquennial Conference of the Universities in India passed the following resolution:

' . . . A practical solution of the problem of unemployment can only be found in a radical readjustment of the present system of education in schools in such a way that a large number of pupils shall be diverted at the completion of their secondary education either to professions or to separate vocational institutions. This will enable the Universities to improve their standards of admission.

'That the Government be requested to establish, or help in the establishment of, institutions for imparting vocational training, such institutions being based on a carefully planned economic survey of the country.'³

¹ Loc. cit., p. 187.

² *Preamble to the Resolution of the Government of the United Provinces, No. 1083 G LXV—562—1934, dated 8th August 1934, Allahabad, 1934.*

³ Communication from the Secretary of the Inter-University Board, India.

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The situation in India is, of course, furthermore complicated by the fact that approximately 90 per cent. of the inhabitants of British India are illiterate¹ or were so in 1921. Education is top-heavy. Owing to the lack of general education life on the land and in the villages is difficult to bear for the educated Indians; this is a further incentive for young people to flock to the universities, which prepare for government positions enabling them to live in the cities. The political causes swelling student enrolments to which we have already referred² are accentuated by the general state of education in India.

At first sight the secondary schools of the *United States of America* seem better adapted to the needs of society. Determined in their character by the idea of equality of opportunity, they cater for every type of student and provide all kinds of vocational and other courses, so much so that according to I. L. Kandel³ more than 300 subjects or branches of subjects are being taught in American high schools. Like department stores they are adding ever 'new lines' to their business. It is this very multiplicity of courses which defeats the noble end the American secondary schools have set themselves—to prepare the masses of the American people for a fuller and better life. It is also one of the main causes which has led to the invasion of the American colleges and universities.

In the course of adding ever new courses to the high-school curricula, all clarity concerning the purpose of secondary education has been lost. On the plea of making education 'meaningful' and 'significant' in the immediate present,⁴ formal subjects essential to all general education are being abandoned or their teaching restricted to a few hours. Modern languages, over which European schools take six to eight years, are taught in two-year courses. The higher forms of mathematics are neglected. Even for the 'practical' and vocational courses so little time can be allotted—the claims are so numerous—that most pupils do not stay long enough with any one subject to acquire more than the mere

¹ *India in 1930-1*. A statement prepared for presentation to Parliament in accordance with the requirements of the 26th Section of the Government of India Act (5 & 6 Geo. V, chap. 61), Calcutta, 1932, p. 625. Compare also Sir George Anderson, *Progress of Education in India, 1927-32*, Tenth Quinquennial Review, vol. i, Delhi, 1934.

² See p. 52.

³ Isaac L. Kandel, *The Dilemma of Democracy*, Cambridge, 1934, p. 45.

⁴ *Ibid.*, p. 37.

mechanics of it'.¹ Hence the great danger that in attempting to do justice to all justice is done to none.

The results of these trends are obvious: on leaving high school many pupils possess only a very sketchy general education. They have to proceed to college if they want to perfect it, and the colleges are obliged so to arrange their curricula as to provide that general education which was neglected in the high schools. They themselves become schools for the masses rather than institutions of higher learning in which those endowed with exceptional intellectual ability pursue their specialized studies, or reach those greater depths of understanding which at all times and in all countries have been the privilege and the responsibility of the few. Those, on the other hand, who on leaving high school are not able to proceed to college know a few things about many subjects. This is not the chapter in which to discuss whether they are any happier for this diffuse knowledge or whether they are better prepared for life. For the moment we are concerned only with the effects of the organization of secondary education upon the development of higher education. And from this point of view there can be no doubt that the state of secondary education in America is directly responsible for a large increase in student enrolments.

Academic salesmanship

There remains one further phenomenon to which Abraham Flexner² has drawn special attention: the attempt on the part of the universities themselves to increase their enrolments, either out of a lusty spirit of competition which seems to inspire some of the Alumni Associations in America to ever new propagandist efforts or because it makes it easier to raise funds for the university. As H. T. Tizard in his Address to the Royal Society puts it: 'It is unfortunate that there is quite a strong financial incentive to increase the number of students at universities; it looks so well on paper. . . .' Some educators have become adepts in the art of advertising and have attempted through the radio, through posters and pamphlets, personal visitations and follow-up letters, to draw new students into their institutions. Undoubtedly some of these apostles of higher learning are inspired by the conviction that any

¹ I. L. Kandel, loc. cit., p. 45.

² Abraham Flexner, *Universities: American, English, German*, Oxford and New York, 1930.

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form of higher education is beneficial and that they are rendering a real service to young people and to their country. On the other hand, it is rather significant that most of the advertising campaigns are not intended to serve higher education as such, but to boost particular institutions, and that they are largely confined to those countries in which the colleges and universities depend to a considerable extent on student fees and on private financial backing rather than on state support.

The results of these efforts are difficult to evaluate. They have certainly contributed towards the creation of that general attitude which sees in college the stepping-stone to social position and better jobs. They have led to the acceptance of 'also-students' whose studies are of benefit neither to themselves nor—apart from fees—to the college which accommodates them. Yet the effects of these campaigns should not be overestimated. They may have increased student enrolments in particular institutions by diverting them from others, but by and large they have probably only added to general student enrolments in so far as they have helped to crystallize those urges for higher education which find their origin in the economic, social, political, and general educational development of modern times.

THE ALLEGED OVERCROWDING OF THE UNIVERSITIES

TO speak of the overcrowding of the universities is very much *à la mode*. At the same time a great deal of confusion exists as to the proper use of the term. In public discussion it is applied indiscriminately to different phenomena. Most frequently it is used where large numbers of college and university students are unable to secure jobs after graduation. Yet it is obvious that this use of the term is misleading, that it would be more correct to speak in such a case of the unemployment or overcrowding in the professions. Whether and to what extent such unemployment is actually due to an over-expansion of student enrolments will have to be discussed in later parts of this study.

For the moment we are only concerned with the more immediate question of whether the torrential influx of new students has resulted in an overcrowding of the universities themselves. This question may be approached from two different angles. It may be held that overcrowding exists wherever lecture rooms or laboratory facilities are inadequate. A definition in such physical terms, while helpful, does not fully meet the problem: otherwise that university would have to be considered the best which provided the most comfortable armchairs for its students—a notion not altogether foreign to the minds of some alumni and generous donors. Obviously something more is at stake. An adequate definition has to be conceived in terms of the ultimate purpose or purposes for which universities have been founded and are being maintained. From this point of view overcrowding exists wherever, owing to an increase in student enrolments, the institutions of higher learning are unable to meet their essential tasks. In this connexion the subsidiary question arises, whether the difficulties are purely quantitative, i.e. due to the influx of too large numbers of students, or whether they are due to the poor quality of the students seeking access to higher studies.

Before we attempt to answer these questions it is essential to reach a clear understanding of the *raison d'être* of the institutions of higher learning.

PURPOSE OF HIGHER EDUCATION

We have described as institutions of higher learning 'those establishments in which the instruction serves the double purpose of promoting the advancement of science and providing professional training'. For practical purposes such as the establishment of university statistics this definition is more or less adequate. It needs some further explanation, however, if we are to find the standards by which the success or failure of higher education is to be judged. Few people would question the claim that the institutions of higher learning, and particularly the universities, ought to serve the advancement of scholarship, whether in the humanities or in the science faculties and departments. Abraham Flexner, in his scholarly passion—this is not a contradiction in terms, for there is no greater passion than the passion for truth—would even affirm that the universities have no other tasks. In other words, any university which does not put the advancement of learning above everything else, which considers the teaching function as one of its essential tasks, is likely to fail in its trust:

'For, as I view the subject, a university is primarily an institution of learning. . . . The mere teaching function recedes; research, investigation, the education of promising scholars in the technique of training and research come to the front. The two functions cannot to-day be combined, as the American university with its graduate school and undergraduate college tries to combine them; for the number of students becomes unwieldy and the faculty is distracted between two inconsistent responsibilities—teaching boys and educating men.'¹

Abraham Flexner's indictment of the American universities, which could easily be extended to universities in other countries, must not be taken lightly. For there can be no doubt that an *ad hoc* pragmatism, translating itself into a tendency to make learning subservient to immediate practical ends, and the desire to give a minimum education to a maximum body of students have reduced many universities or departments of universities to the level of advanced schools. On the other hand it appears to us that Flexner's conception of a university is too narrow. Not only does it consciously exclude the colleges because they put their main emphasis on teaching, i.e. the preservation and passing on of

¹ Abraham Flexner, 'American Universities as Institutions of Learning', in *The University in a Changing World*, London, 1912. pp. 121 and 122.

knowledge—it also tends to restrict unduly the function of the universities themselves. Certainly, it is one of the most sacred tasks of the universities to advance knowledge by fostering research, to wrest even new territory from the unknown, but there is also the task of preservation and co-ordination. It must be realized that not only have the numbers of students become unwieldy, but the wealth of knowledge accumulated through the ages has taken on such dimensions that even for the select few it has become difficult to grasp the essential discoveries of the human mind, to arrive at a synthesis of disparate knowledge, to understand first principles. What other institutions but the universities and colleges are there to attempt such a synthesis, to give a vision of it to the best men and women of all countries, so as to enable them to hold positions of leadership in a world which without such leadership is in danger of complete disintegration? Even from the point of view of specialized research, such a taking stock is essential. To chart a new road in the unknown is important, but it will only find its true significance when seen in its place on the general map of human knowledge. In a word, the universities and colleges, before turning to new discoveries, have to teach their students the essential elements of the available wealth of human knowledge and bring them into a synthesis. It means general education on a level which only the institutions of higher learning can attain. Temporarily at least, research and investigation recede and the teaching function comes to the front.

Some years ago European university circles reverberated with the discussions of another trenchant attack on the products of modern university education, Julien Benda's *Trahison des Clercs*.¹ University men, according to Julien Benda, the medieval *clerici*, whose privilege it has been to inherit the sum of the race's knowledge and to whom has been vouchsafed the inspiration of national, cultural, and spiritual tradition, have abandoned the cause of truth and justice which they were called upon to serve. Trained as they were, partially at least, at the expense of the nation, they have sold their ability, their skill and knowledge, to the forces of self-interest which dominate the world to-day and block the way to a fuller, wider, and freer life. Greed, the will to power, desire for security

¹ Julien Benda, *La Trahison des Clercs*, Grasset, Paris, 1927. See also Walter M. Kotschnig, Introduction to *The University in a Changing World*, London, 1932, p. 8.

and comfort have betrayed those named to be the *élite* into committing this worst of all treasons. And men begin to ask: Is not the present university responsible for this diversion of talent to base ends? Does it not actually incite to this grand betrayal of the intellectuals, by attempting to give a theoretical justification of our present society and by training men who will serve this present order willingly, asking no questions?

These questions were asked some time before the German universities, to which the world owes a tremendous debt, surrendered their freedom and their integrity to the exigencies of the new totalitarian régime. Their attempt to justify the present régime and its 'philosophy' certainly seems to constitute the supreme betrayal of the idea of a university. Yet, while there is undoubtedly betrayal, there are many in the German universities of to-day who are not aware of it, who honestly believe that they have found a new idea of learning, the true idea. With them it is a question of error rather than of betrayal. Not their honesty but *their intelligence stands condemned*. In most of the western countries, on the other hand, there are many of whose intelligence there is little doubt, but who fit Benda's analysis only too admirably. And there are universities which have debased themselves to become 'service institutions', intent on meeting the venal demands of a society which values only what is immediately useful.

From these findings Julien Benda draws the conclusion that the modern *clerici* must withdraw from the daily struggle in the arena of the world, that they must regain a lofty position *au dessus de la mêlée*, climbing the heights to breathe the pure air of truth. Here we come to a parting of the ways. It seems to us that the very emphasis on a severance between thought and action is partly responsible for the great betrayal which Benda rightly condemns. It leads to a kind of *Weltschmerz*, a loss of contact with the realities of a teeming world, which renders thought sterile. It creates the type of 'professor' who is altogether helpless in practical things, who takes his system for reality, who loses all sense of proportion and is unable to see the world in its totality. He gives little or nothing to students craving for synthesis and understanding. They turn from him, and while going through the mechanical motions of acquiring the minimum knowledge necessary to qualify for some diploma they seek reality outside the universities, in the apocalyptic visions of the prophets of the street, in the emotional

orgies, untempered by reason, of second-rate politicians and quacks. If the German universities before Hitler had been less *weltfern*, less removed from a concrete understanding of social and political realities, it is doubtful whether they would have collapsed quite so easily before the onslaught of the totalitarian claims of national-socialism.

Closely related to this question of *Weltnähe* or *Weltferne* of the universities is the other problem of the so-called *professionalization* of college and university. In the light of what has gone before it is obvious that we share the concern of those who see the universities threatened by the promiscuous adding of ever new subjects and courses, designed to provide a purely vocational training for students whose general education or intellectual acumen renders them unfit to share in any higher form of intellectual endeavour. The teaching of the purely technical aspects of hotel management or of business administration may enhance the student's chances of a good salary but it is not likely to broaden his views, to give greater depth to his understanding of matter and of mind, nor can it be expected to yield important new elements of truth. It is significant that this vocationalizing trend is usually accompanied by the gradual abolition of certain requirements such as a knowledge of classical civilizations, which in many countries was adopted in order to lighten the burden of growing masses of students. On the other hand, we cannot agree with those who cry havoc because the universities are taking an interest in such 'worldly' subjects as journalism or transportation. It is better that the definition of the tasks of journalism in a modern society, of its sociological and economic implications, should be left to the universities than to the heads of the various ministries of propaganda.

Truly professional training is neither utilitarian nor purely technical. A professional man who is more than a craftsman must be able to rise above mere technique. He must have an understanding of first principles and must be able to relate them to his own basic field of knowledge. Hence it is essential that he should be given the best possible general education—such as only the college or university can convey—and enabled to concentrate on his own particular subject in an atmosphere which is conducive to original research, irrespective of any monetary reward. The fact that he pursues his studies with a practical object in mind—preparation for a profession—is no impediment; on the contrary,

it serves as a safeguard against the artificial isolation of the institutions of higher learning. Professional education conceived in this way has always had a place in the universities. Salerno and Bologna were first of all professional schools. It is in this sense that we are inclined to follow Carr-Saunders: 'It is in the field of professional education that the best work of the universities can be done to-day.'¹

There remains one further function of higher education which has been admirably stated in the most recent report of the University Grants Committee in Great Britain:²

'It will be generally agreed that a University education is or should be designed not only to enable a student to be efficient in any vocation or career which his talents, bent, or circumstances may have led him to choose: it ought also to afford him what might broadly be described as an education for life. An education for life may be achieved in many different ways. Certainly it is not achieved solely in the lecture room, the laboratory, or the library. The mere acquirement of knowledge is not enough. Notoriously the most subtle and potent educational influences in the older Universities of this country have been those which, being indirect, come not with observation, and originally were probably unforeseen and unintended. The excitement of being plunged into a new environment and a more spacious mode of life, with all its possibilities of congenial study and congenial companionship; the sense of privilege in being made heirs of a great tradition, citizens of no mean city, with the freedom of "its streets where the great men go"; above all, the informal discussions of a few friends about all things in heaven and earth up to all hours of the night and morning, where the argument is followed whithersoever it leads; the clash of mind between the youthful historian, medical student, chemist, theologian, and engineer, members often of different social classes and bringing into the pool different experiences and different prejudices, with the resulting recognition of the existence of different points of view and of the need of taking account of them; and in all this the exhilarating sense of intellectual daring and adventure: these are the influences which stimulate thought and enlarge its boundaries, develop the faculty of judgment and arouse in students that energy of the soul in which Aristotle found the essence of true well-being.'

This passage, appearing in an official document, reflects the typical British or, one might even say, Anglo-Saxon attitude to

¹ A. M. Carr-Saunders, *The Universities and the Professions*, An address delivered to the Experts' Conference on the Overcrowding of Institutions of Higher Learning, Geneva, Sept. 20-2, 1932.

² Loc. cit., p. 13

higher education. It postulates the development of character as much as the training of the mind, and conceives the university as a community of living and learning. Except in the English-speaking countries little attention has been paid to this side of higher education. It was either held that to help character evolve was not amongst the tasks of a university and should be left to outside agencies, or it was assumed that the strict self-discipline entailed in scientific studies was the strongest force making for individual growth. This latter assumption has much in its favour, particularly where students are able to work under the inspiring leadership of a great scholar. At the same time it is interesting to note that the idea of the residential college, or at least of the importance of 'living in fellowship', is gaining ground in many countries, in the form of 'house-plans', *cités universitaires*, *Kameradschaftshäuser*, or similar schemes. This tendency shows a growing recognition of the responsibility of the universities for an all-round development of its students.

These then are the tasks of higher education: to teach students the essential elements of human knowledge, as far as possible co-ordinated by an understanding of first principles (general education); to awaken in them the habit of critical thinking and that intellectual curiosity which leads to original research (advancement of knowledge); to provide genuine professional training which—while intended ultimately for practical ends—can be neither purely academic nor purely utilitarian in character and must be based on a sound general education of the highest form attainable; to constitute a community of living and learning, allowing for an all-round development of the learners. These criteria may not at all times and everywhere be equally important. In liberal arts colleges, for instance, professional training takes a subordinate place, while general education is in the foreground. These differences must be taken into account when an attempt is made to determine whether the institutions of higher learning are overcrowded. For overcrowding, as has been pointed out, exists where a college or university, owing to excessive student numbers, fails to meet its essential tasks.

INADEQUATE ACCOMMODATION

It has been pointed out that the purely physical overcrowding of institutions of higher learning, the shortage of space in lecture

halls, laboratories, and the living-quarters of residential colleges, does not necessarily determine the quality of work accomplished. The report of the University Grants Committee emphasizes this point:

'Undoubtedly it is possible in the world of learning to exaggerate the influence of surroundings, of convenience, of the conditions of comfort or discomfort under which work is carried on, and our visits have brought it home to us that there is no very close connexion between the quality of buildings and the quality of work that is being done in them. Indeed, we have seen instances of the victory of spirit over matter which approach the heroic.'¹

Any one who has seen English professors and students at work in disused army huts or in abandoned office quarters in congested urban districts will agree with this statement. There are, however, limits to human endurance, and not all students are heroes. The degree of overcrowding can become such as to make any constructive work practically impossible and to interfere seriously with the attainment of the purposes of higher education. This point has undoubtedly been reached in many countries.

Vienna, which before the War was the Mecca of all medical students, saw its position diminished not only because of the growth of model medical schools, with unparalleled equipment, in the United States and in England, but also because the university found it impossible to keep its own equipment fully up to date for the needs of an ever-increasing number of students. When student enrolments reached their peak in *Germany*, courses for which 2,000 and more students were registered in a single university had to be delivered in halls which barely accommodated 600 or 700.

The situation in the south-eastern countries of Europe, where the increase in students as will be remembered was particularly rapid, is extremely difficult. The report from *Bulgaria* states that some 40 to 50 students have to be sent away every day from the university library, though it is only accessible to professors and students. Added to this is the fact that, owing to financial difficulties, it has been found impossible to supply a sufficient number of text-books and to maintain the subscriptions to scientific magazines published in foreign countries. Constantin Kiritzesco waxes eloquent in describing the difficulties of the *Romanian* universities.

¹ *Loc. cit.*, p. 34.

After describing how after the War 200-300 students had to work in laboratories built for 40 or 50 he goes on to say that in spite of superhuman efforts it has not been possible to remedy the situation:

'In spite of everything that has been done and in spite of a certain amelioration it cannot be said that the overcrowding crisis has been overcome. It has taken on various forms according to the various faculties. To give a few examples: the schools of medicine, particularly that of Bucharest, have for years been troubled by "the problem of the corpses" necessary for the study of anatomy. The morgues of the city and of the hospitals were unable to provide a sufficient number of corpses to meet the need of the growing number of medical students. This question of a material shortage led to political agitation and to serious difficulties between Christian and Jewish students. The confessional authorities of the Jewish community refused for religious reasons to supply Jewish corpses; in return the Christian students forbade their Jewish colleagues to dissect Christian corpses. The effects and repercussions of that agitation are still in evidence. Furthermore, the number of patients in the clinics has become insufficient to allow of a thorough practical training of the students, particularly as for humanitarian reasons the patients seeking a cure in the hospitals have had to be protected. In general, it has been necessary in all the faculties which require laboratory work to simplify and restrict the programmes and to have students work in shifts in order to meet the minimum requirements set by the programmes.'¹

This quotation is of special interest as it shows that the overcrowding of the universities may lead to general unrest in the student body and accentuate the conflicts which exist between different student groups. The 'problem of the corpses' was used as a pretext for serious rioting which more than once resulted in the closing of the Romanian universities.

To return to the more serene atmosphere of *England*, where corpses are no political problem, at least within the universities, it must not be assumed that there is no overcrowding crisis because remarkable work has been done in spite of inadequate accommodation. The frequently cited Report of the Universities Grants Committee itself speaks of a building-crisis and also stresses the continuing need for better library facilities. There is a recurring emphasis on the need for additional halls of residence, both because the demand for places in such halls cannot everywhere be

¹ Loc. cit., p. 53.

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met and because they are considered a desirable element in the education of the students. It is obviously felt that better educational results could be achieved if more students could be enabled to 'live in'.

An attempt to determine in an indirect way the degree of overcrowding in various countries by a study of university budgets and the allocations made for building and maintenance has not proved helpful. The fluctuations in the value of national currencies and of purchasing-power make a comparison over a number of years very problematical. Nor is there a direct relation between the increase in student enrolments and in expenditure. Any substantial increase in the number of science students obviously necessitates considerable expenditure for further laboratories, while an increase in arts students can be more easily met financially. There can be no doubt, however, that the funds at the disposal of the higher institutions of learning in Europe have not kept pace with the growing needs for more accommodation. In countries like *Poland* and *Latvia* the budget for extension of buildings and for maintenance has even substantially decreased between 1925 and 1933. This may, however, be partially explained by the large investments in new buildings made in the years after the War.

One has to be very careful in making generalizations about the *United States*. The situation of the colleges and universities varies from region to region and from one type of institution to another. On the whole it is probably true to say that the American universities are not suffering from a lack of accommodation likely to interfere with the accomplishment of their tasks. America has even at times been accused of showing more interest in bricks than in brains. However that may be, it is certain that both legislators and private donors have liberally endowed American institutions with buildings which are the envy of all European universities. The depression has retarded further building-extensions, but there are signs everywhere that this slowing up was only temporary.

The same emphasis on buildings can be found in *Japan*. Professor Kakehi writes:

1. 'It is true that the personal attention of professors given to individual students in guiding their research is somewhat restricted by the increased numbers, but to make up for it there has been a great improvement in the equipment and a considerable increase in the funds for research as a consequence of the growing recognition and appreciation

of supporters and the general public, to whose minds the life of the student body is an important factor in their appraisal of universities.'

THE BURDEN OF THE TEACHER

Mitsuakei Kakehi's reference to the attention given by professors to individual students leads us to the heart of the problem. In our opinion the most perfect laboratory facilities cannot replace the direct contact between teachers and students. While this relationship cannot be defined in quantitative terms, university statistics throw some light on the problem. In practically all countries there are to-day more students to each member of staff than there were before the War. This fact was revealed in the course of a special study made in the early stages of our inquiry. It is safe to assume that the following figures for 1932 have not substantially changed since.

In 1932 there were 20 students to each staff member in Holland, compared with 13 in 1913; in Norway 22 instead of 16; in Italy 17 instead of 12; in Spain 21 instead of 17; in Romania 22 instead of 14; in the United States 13 instead of 11. In Latvia the ratio has remained the same (23 students to each staff member), whereas in Greece it has even improved (34 in 1932 as against 36 in 1913). The following count as staff members: full professors, associate professors, lecturers, assistants, and tutors. For Austria, Great Britain, Poland, and Yugoslavia no pre-War figures indicating the number of staff members could be obtained. A comparison of the years 1925 and 1932 reveals, however, the same trend which is evident for the period 1913-32. There were 17 students to each staff member in Austria in 1932 as against 16 in 1925; in Poland 19 as against 16; in Yugoslavia 26 as against 20. The ratio in Great Britain has remained stationary—14 both in 1925 and in 1932.

It would be wrong to draw from these figures the conclusion that there has been no great increase in the burden of the individual member of staff. The comparatively favourable picture is mainly due to the great increase in the number of assistants and lecturers, while the number of full professors and assistant professors has increased relatively little. On an average—to take only some of the lands we have mentioned—there were in Holland in 1932 34 students to one professor, whereas in 1913 there were only 16; the corresponding figures for Italy are 38 against 26; in Latvia 92 against 60; in the University of Athens 93 against 50. Comparing

the change in ratios between 1925 and 1932 we find that the proportion of students per professor has increased in Austria from 50 to 64; in Poland from 42 to 52; in Yugoslavia from 49 to 55; and in Great Britain from 50 to 64 (full professors only). In all these cases it is obvious that the increase in the number of professors has been badly lagging behind the increase in student enrolments. Since the professors can delegate only certain parts of their work to their younger colleagues, and usually have to retain just that task of examination which is one of their heaviest burdens, it is unquestionable that there is full justification for their frequent complaint that research is becoming ever more difficult. The loss to the University herself and the difficulty of fulfilling her task in the realm of learning are plain to see. For the students the personal contact with the authorities on their subject has become more difficult or even impossible. The relation of master and disciple becomes a relation of teacher and pupil.

The average figures given above, arrived at by dividing the total number of students by the total number of staff members in any given country, do not reveal the entire picture. The burden of the individual professor varies both from subject to subject and from institution to institution. The only detailed study of this subject, which has come to our notice, appeared in the *Deutsche Hochschulstatistik* for the summer term 1934.¹ During that term the German universities counted 71,889 students and 1,916 full or associate professors (*ordentliche und beamtete ausserordentliche Professoren*) or approximately 38 students per professor. Looking more closely at the distribution by faculties, it is not surprising to find that in a subject such as chemistry, which requires laboratory work and supervision, there are per professor 41.2 students taking degrees in chemistry, while there are 52.4 students per professor in the law faculty. But even within the various branches of the humanities there are very substantial differences. Thus, while on average one professor of classical languages was responsible for 12.3 students of that subject, there were 83.5 students to each professor of modern languages. This latter figure indicates an advanced degree of 'overcrowding', for no one can be expected to follow closely the scholastic work of 83 students and do creati-

¹ Dr. Karl Keller, 'Die Dozenten an den deutschen wissenschaftlichen Hochschulen und ihre Belastung', in *Deutsche Hochschulstatistik*, Band 13, Sommerhalbjahr 1934, Berlin, 1935, pp. 28-33.

work himself. A comparison of various university centres with each other is equally enlightening. Each professor in the law faculties of Berlin and Munich, the two largest German universities, had to carry 114.7 and 101.0 students respectively. The corresponding figures for Jena, Marburg, and Greifswald, three of the smallest German universities, were 27.7, 26.4, and 26.1. As the best scholars—though there are exceptions—hold chairs in Berlin and Munich, it leaps to the eye that the greatest men in their subjects are the most difficult to approach. The inspiration they could give is thwarted. Plato himself, swamped by a mob of students, would have found his Banquet an abject failure.

Even if the number of staff members in the individual universities could be increased in proportion with the increase in student enrolment, the unchecked growth of these universities would present a real danger. It is safe to state that there is a maximum growth beyond which no institutions of higher learning should be allowed to develop, though this maximum may vary according to differences in their structure.¹ Too small universities may find it difficult to develop adequate educational facilities, particularly in the sciences. Too large institutions not only make the essential contact between the students of the various faculties practically impossible, but they generally become so unwieldy that the energies of the very best men, both on the staff and often amongst the students, become absorbed in administration. The head of the university or college and his deans find themselves unable to follow their own scientific

¹ The Report of the Universities Grants Committee (*loc. cit.*, p. 33) contains a delightful passage which is very much apropos: 'This question [i.e. of the optimum number of students, *Ed.*] is, of course, quite distinct from the one we have already touched upon—that of the appropriate number of students in relation to the population of a country as a whole. It is conceivable that the total number of students may not be excessive, and yet that the number in a given University may be too large to admit of that university being really efficient. In the course of our visits we made a point of asking the various authorities whether they had considered this question of appropriate numbers. In most cases we received the answer that the question had been considered but by a curious coincidence it seemed that the ideal number was always a little in excess of the existing number. While this answer may, of course, be the correct answer we must confess to a certain measure of doubt as to whether the coincidence is always inevitable. That the ideal number should vary, as between one centre and another, is only to be expected, but we were unable to discover any principle of definition and, indeed, except in the case of some of the Medical Faculties, none of the Universities appear so far to have taken any serious steps to control their numbers, or even to have thought out very clearly the principles on which any attempt of the kind should be made.'

98 THE ALLEGED OVERCROWDING OF UNIVERSITIES

pursuits, which is particularly serious where, as in the United States and in England, presidents or vice-chancellors hold their positions permanently. Considering that many of them are scientific men of the first order, the loss to learning is obvious. Furthermore, too large student enrolments necessarily lead to regimentation, to classroom drill, to a system of points and credits, utterly foreign to true university education.

These are not illusory dangers. Any one with any knowledge of the monster universities in America and in Europe will appreciate the gravity of the situation, which, as has been shown by our last footnote, has by no means been overlooked by responsible educational leaders. H. T. Tizard, the Rector of the Imperial College of Science in London—to give another quotation—stated in his 1934 address to the Royal Society: ‘. . . I have little hesitation in saying that universities are too full. As a result the tendency is towards over-organization, too little latitude, and too much spoon-feeding. The more distinguished the teacher, the more he is tempted away from teaching and research: his presence is required on committees.’

LOWERED STANDARDS

Before we are able to pull the various threads together one further fact has to be stated clearly and fearlessly. It is a fact to which we have referred before, but which is often covered up in a spirit of false sentimentalism, that there are to-day thousands and hundreds of thousands of young people in the institutions of higher learning who are utterly unable to benefit from a higher education; they are neither by intellect nor by character fitted for higher studies.¹ The large number of students who never finish their courses, even though they might afford it, is only one proof of this. Such students go to college or university simply to improve their social standing or because they have not happened to get any employment on leaving secondary schools, or for many other

¹ The presence of these students is all the more undesirable as there are in most countries certainly many first-class brains in the age-group 18 to 23 who would be a credit to any institution of higher learning, but who for economic or other reasons are barred from higher or even secondary education. (Cf. J. L. Gray and P. Moshinsky, ‘Ability and Opportunity in English Education’, in *Sociological Review*, 1935, vol. xxvii, pp. 113–62. Furthermore, S. M. Stoke and H. C. Lehman, ‘Intelligence Test Scores of Social and Occupational Groups’, in *School and Society*, vol. xxxi, 1930, pp. 372–7.) See also footnote on p. 100.

reasons which have nothing whatever to do with intellectual or professional perfection. They are encouraged by people—educators amongst them—whose minds are warped by preconceived ideas of a mistaken egalitarianism, which has lost all sense of quality.

Isaac L. Kandel in his profound analysis of American education, given in his address on *The Dilemma of Democracy*, points out the disastrous effect of the confusion between 'equality of opportunity' and 'identity of opportunity'. Equality of opportunity in education means that every one should be able to get the education best fitted to his or her particular gifts, while identity of opportunity presupposes that all people, given the right kind of environment, are able to reach the same point, and that all should therefore have access to the same kind of educational facilities. This confusion has made possible the *Berechtigungswesen*, the fetish of diplomas, which leads the barber and the hotel manager to seek a college degree. It has not only done untold harm to the cause of true democracy, but has led to the flooding of the universities with students ill fitted for higher education.

It would be erroneous and unfair to conclude from this state of affairs that students are to-day necessarily of lower intellectual capacity than in the past. A. M. Carr-Saunders in a personal communication to the author states:

'It is not true to say that the students in English universities are now of lower intellectual capacity than formerly. At Oxford and Cambridge average capacity is probably higher owing to the fact that the rich young men of very average or subnormal capacity, who used to come to have a "good time", now come no longer. Their places have been taken by abler students from secondary schools. The newer universities have not been in existence long enough to make it possible to pass any judgement.'

This general statement, which is probably valid for a good many other countries, is, however, followed by a warning:

'One danger that threatens standards arises from the attempt to find places for working-class students who enter, not from secondary schools, but from the W.E.A., &c. They are often of poor intellectual calibre. The reason seems to be that they are either of the politically ambitious type or more often of the very admirable plodding type devoured by some pathetic desire to improve themselves. They are few in number yet, but they are increasing; and it is urgent to find means to ensure that

the abler types from the working class come along rather than the sort who appear now.¹

Unfortunately, the standards of the schools or institutes of higher learning are not determined by the intellectual calibre of their best students; they tend on the contrary to conform to the capacity of the students who are weakest both in intellect and preparation. This becomes particularly evident where owing to mass enrolments any personal treatment of individual students is rendered practically impossible, and where for various reasons which have been enumerated the proportion of unfit students is growing. In all these cases a definite lowering of general standards of achievement is inevitable. Outstanding achievements will of course still occur, but they will do so in spite rather than because of prevailing standards. The voices confirming this general rule are numerous. To avoid tedious repetition we shall quote a few only. Professor R. C. McLean, Secretary of the International Universities Congress, concludes: 'There can be no doubt that we receive from the schools too large a percentage of weak students who interfere with the proper attainment of the purpose of the

¹ This is not the place to deal at length with the problem of ensuring that the desirable educational emancipation of the lower classes shall be so directed as to further rather than impede the progress of higher learning, and serve the best interests of a democratic society. It raises both questions of early selection and of adequate preparation in congenial surroundings. William C. Bagley (loc. cit., p. 585), after pointing out that a large section of the students in teachers' colleges come from the lower classes, emphasizes 'that the strictly professional schools for teachers face a serious problem in attempting to compensate through their curricula and their institutional life for what are likely to be rather marked limitations in the cultural background of a substantial proportion of their students'.

The *Studienstiftung des Deutschen Volkes*, designed to assist exceptionally gifted poor students—i.e. already carefully selected students—has met with similar difficulties due to a lack of cultural background on the part of their grantees. (For a careful analysis of these and related problems see Dr. Robert Ulich and Dr. Erich Wohlfahrt, *Some Aspects of Educational Sociology*: a statistical analysis of the selective experiences of the *Studienstiftung des Deutschen Volkes*, prepared for the International Institute Examinations Inquiry.) It seems to us that this is above all a question for the secondary schools, that the working-class students should not be handicapped in their university career by being admitted without an adequate secondary training acquired in surroundings which will compensate for the lack of cultural background in their homes. As long as there is no real planning in the admission to and the training in secondary schools, even brilliant students from the working class will in many cases continue to be a drag on the institutions of higher learning from which, for obvious reasons of social justice, they cannot be excluded if democracy is to prevail.

university.¹ Clarence Shedd recognizes the 'levelling-down' process for America: "The problem of the student of superior ability in the big university, where classroom work and the whole organization of the university tend to be "levelled down" to meet the needs of the average student, has been another important factor in the discussions of overcrowding and the selection of students."²

An indirect proof of our contention can be seen in the changes of curricula which have taken place and which are particularly marked in a country like the United States, where the institutions of higher learning are not, as in Europe, organized on rigid faculty lines. Charles H. Judd has made a most valuable contribution to our knowledge of these changes by comparing the frequency of registering for certain courses at the Colleges of the University of Chicago over the period from 1900 to 1930. In a table entitled 'Courses in various subjects in the records of one hundred typical members of the June graduating classes of the colleges of the University of Chicago'³ he shows the following differences for the years 1900, 1910, 1920, and 1930 respectively: French—283, 220, 296, 116; German—306, 330, 180, 65; Greek—195, 109, 19, 12; Latin—351, 208, 86, 23; Mathematics—253, 188, 142, 131; Philosophy—151, 107, 87, 85. During the same period the following 'practical' and 'professional' subjects gained in popularity with the students of the four graduating classes: Art—3, 38, 31, 106; Education—45, 134, 217, 432; Commerce and Administration—1 (1920); 142 (1930). We hope not to be accused of *parti pris* if we regret these shifts. They indicate a considerable weakening in the attendance at such courses as languages and civilizations, mathematics, philosophy, which are pre-eminently suited to lay the foundations for a sound general education and for an understanding of first principles. As a truly professional training, on the other hand, is unthinkable without such foundations it is to be feared that much of the increased interest in 'professional' subjects has, at least from the students' point of view, resulted in a ready-made kind of vocational training which does not accord with the purpose of higher education. Some may consider these

¹ R. C. McLean, *The University To-day*, An address delivered to the 14th Annual Conference of International Student Service, Woudschooten, 1935, p. 7 (mimeographed report).

² Clarence Shedd, 'Higher Education in the United States', in *The University in a Changing World*, loc. cit., p. 153.

³ Charles H. Judd in *Recent Social Trends*, loc. cit., p. 339.

changes a necessary consequence of changing needs in a changing society; we are inclined to see in them a definite lowering in the standards of higher education. That with changing conditions of society and the advance of knowledge new subjects must find a place in the curricula of colleges and universities, only the educational diehard will deny. Sociology and psychology are such subjects of comparatively recent date. It is unthinkable, however, that they should be studied by people who lack a knowledge of languages, who have no understanding of past and present civilizations, whose mind has not been trained by an occupation with mathematics and philosophy.

Japanese higher education has followed in the footsteps of America, where some of her best scholars and teachers have been trained. With increasing student enrolments there is a growing emphasis on 'practical' subjects, which is accentuated by Japan's industrial and commercial development. According to Professor Kakehi the 'professionalization of the university', i.e. introduction of vocational training, is being welcomed. 'It is regarded as the very point to be emphasized as an important counter-measure to the radical thought and movements prevalent especially amongst students. Too much theoretical study, especially of social sciences, is believed by many to be one of the chief causes of radicalism. . . .'¹ Our eminent Japanese collaborator will forgive us—if he himself should hold this view, which we doubt—if we find that this argument is not convincing. Undoubtedly, half-baked theories are worse than no theories at all. We doubt, however, whether the technicians turned out by institutions of higher learning are proving a more stable element in times of stress, such as periods of prolonged unemployment, than those who find balance and solace in the depths of a sound general education.

On the European continent the rigid organization by faculties and a more pronounced traditionalism have led to fewer changes in curricula which could be interpreted as a lowering of standards. On the other hand it has already been sufficiently stressed that the arrival of new masses of students has led to regimentation, to classroom rule, to a lack of contact between teacher and student. These are all elements which tend to depress the general level of higher education, and which make the attainment of its purposes more difficult, if not impossible. In a number of countries courses have

¹ Communication to the author.

been lengthened; it takes students a longer time to obtain a degree. It may be assumed that this tendency reflects to a certain degree the growing difficulty of reaching the ends for which colleges and universities have been founded.

It does not detract from our argument if some countries, in which modern university education is of comparatively recent date, report a definite improvement in standards. These countries have in the past been suffering from sub-normal standards and are now 'catching up'. Under such circumstances increased student enrolments may temporarily tend to raise standards as they oblige the authorities to provide new—and modern—equipment. Work which before was impossible simply owing to a lack of adequate laboratory facilities can now be accomplished. Furthermore, university education acquires a standing in the eyes of the people which it did not have before, and which serves as an incentive to better work. Professor Svolos of Greece reports as follows:

'It is evident that the large number of students has an immediate influence upon the level of university teaching, which becomes more difficult. On the other hand, it has to be admitted that in spite of these difficulties standards improve and become more serious. All the faculties of the University of Athens for instance have been endowed with better equipment and scientific laboratories of all kinds, which satisfy modern requirements, and the staff is enabled to employ modern scientific methods. In one word, while the increase in student enrolments has in some ways had adverse effects—for instance in the faculty of medicine—it is certain that the general level of higher education is superior to that prevailing twenty years ago.'

A similar report reaches us from India:

'We are of the opinion that there has been a steady tendency in the universities to raise their standards, though we feel that there is still room for improvement in that direction, specially in certain departments of knowledge. We are decidedly of the opinion that the level of the first class men now produced by our universities is certainly higher than that of the first class men produced, say 15 or 20 years ago. But we fear that the level of others is still low and we apprehend that it is the presence of men of inadequate intellectual equipment that tends to keep their standards from rising, and we suggest that the Universities should set themselves seriously and earnestly to improve the standards all round.'¹

¹ Sapru Report, loc. cit., pp. 197-8.

We are now ready to summarize. Our exposition of facts and opinions goes to show that many institutions of higher learning are indeed overcrowded: quantitatively by numbers so great that they force the universities and colleges to adopt methods of mass production foreign to the true character of higher learning; qualitatively by students who are ill suited to higher studies and badly prepared. To meet their needs standards have had to be lowered, the pursuit of general knowledge has taken the form of spoon-feeding and cramming, research has become increasingly difficult, and professional education has been debased to vocational training. The degree of 'overcrowding' is not the same everywhere, and remarkable work has been accomplished even in overcrowded institutions. This is greatly to the credit of the real scholars and great teachers who have attempted the impossible and who have succeeded. They are the first to recognize that the danger-point has been reached in many instances, and that a continued uncontrolled increase in student enrolments is likely to lead to a defeat of the very purposes for which the institutions of higher learning

PART II

THE PLIGHT OF THE LEARNED PROFESSIONS

IV

THE 'UNEMPLOYMENT' OF COLLEGE AND UNIVERSITY GRADUATES

IT has been shown in the previous chapter that the rapid expansion of student enrolments has in many instances led to an overcrowding of the institutions of higher learning which has seriously interfered with the attainment of their purposes. In so far as these institutions produce candidates for the professions which tend to require an academic training, one is tempted to assume that the apparent overcrowding of these professions is due to an oversupply of college and university graduates. Before we attempt to prove or disprove this contention it is obviously desirable to gain a clear idea of the extent to which the professions are overcrowded. This is a question which we approach with a great deal of hesitation, as the elements on which a sound reply could be based are insufficiently known.

One of the chief signs of 'overcrowding' in the professions is the extent of unemployment amongst professional men and women and the difficulty with which recent graduates secure employment. At the same time, the term 'unemployment' itself is inadequate when applied to large sections of professional workers, as it obviously does not cover those who have set up or are trying to set up as independent practitioners. In their case it becomes necessary to investigate fluctuations in their incomes, a problem which bristles with difficulties. Finally there are those who have prepared themselves for a profession but who, owing to the impossibility of establishing themselves in it, are forced to accept work which is not in line with their training and which is unsatisfactory both from an economic and an intellectual point of view. As the dividing line between intellectual and manual work, between a profession and a vocation, is fluid, it is extremely difficult to say when a university or college graduate joins the ranks of these *sous-classes*.¹

¹ See M. A. Rosier, *La Notion du chômage dans les professions intellectuelles*, Report submitted to the Juridical Section of the Musée Social, Paris, 1936.

At present neither satisfactory unemployment statistics of intellectual workers nor statistical surveys of the income fluctuations over an extended period are available. Indications of the number of *sous-classes* are, apart from one or two exceptions, lacking completely. The International Labour Office which has been paying special attention to these problems ever since 1927, when it set up an Advisory Committee on Professional Workers, has come to the conclusion that 'the compilation of the necessary statistics encounters difficulties which are at present insuperable'.¹ Nor does it hold out much hope for the future: 'It has to be admitted that the outlook and habits of professional workers would make the compilation of unemployment statistics [not to speak of statistical surveys of income! *Ed.*] concerning them a very difficult matter, supposing even the requisite ways and means of establishing them existed.'²

Under these circumstances, and in order to have some basis on which to proceed, we shall bring together in the following pages, simply by way of enumeration, such facts as have a bearing on our problem. More than in other parts of this report we shall have to be satisfied with instances rather than with comparative tables, with examples rather than with a general presentation of the situation of all the learned professions in all the countries under consideration. This method, while unpretentious, will help us to guard both against wild guesses and against so-called 'reasoned estimates' which are often worse than wild guesses because more misleading.³

Our exposition of facts will tell the story of the plight in which many professions find themselves at present in many countries, of the misery of thousands and tens of thousands of young graduates, of professional men and women who in recent years have found it impossible to make a decent living. It is hoped that it may also yield sufficient indications to enable us to determine in the follow-

¹ 'Remedies for Unemployment among Professional Workers', in *International Labour Review*, vol. xxxiii, no. 3, March 1936, p. 305. ² *Ibid.*, p. 305.

³ Dr. Alfred Z. Reed, one of the shrewdest and most judicious observers of professional life in America, never tires of emphasizing that 'reasoned estimates are worse than wild guesses'. No responsible person will take a wild guess seriously. Reasoned estimates, on the other hand, are usually not only accepted but taken as facts, even when the 'reasoning-process' behind them is unsound. Besides, such estimates dealing with matters of public interest are often widely reproduced and published without mention of the reservations and considerations which surround them, a procedure which deprives them of all value.

ing chapter whether this state of things is likely to last, and whether it is due to a shrinkage in the demand for professional services or indeed to an 'over-production of intellectuals' trying to enter the professions with the intention of earning their living.

AUSTRIA

Professor Josef Dobretsberger, in a first report on the situation in Austria prepared in 1933 for the purpose of our inquiry, finds it impossible, owing to the lack of statistical data, to give any concrete figures for the unemployment of graduates. He emphasizes, however, that the difficulties of professional men and women, and particularly of recent graduates, are considerable. In 1926 the acceptance of new candidates for the judiciary and for administrative positions under the Government had to be suspended altogether for reasons of economy. As these careers used to absorb about two-thirds of all the law graduates, this measure had disastrous effects upon the professional prospects of law students. On the basis of matriculation in the medical faculties during the years 1925-8, Dobretsberger expects a considerable increase in the number of graduating physicians for the years 1931-4, who will find it extremely difficult and in many cases impossible to establish themselves. The situation is worse for engineers, who on leaving the technical colleges find it quite impossible to secure positions owing to the complete stagnation in industry. Even discounting the consequences of the economic depression, Dobretsberger estimates that since 1925 the Austrian universities and colleges have on an average graduated 600 more candidates for the professions every year than could be absorbed.

In 1934 the Federal Government carried through a special census of professions and occupations,¹ which furnished not only an excellent survey of the distribution of the gainfully employed population by professions and vocations as well as by age, but which also gives certain unemployment figures. On the basis of these indications and the available statistics on graduations for the period 1930-4, Professor Wilhelm Winkler analyses the situation of some professions in the report which has been mentioned before (see p. 36) and from which the following data are taken. The number of students leaving the Austrian colleges and univer-

Statistik des Bundesstaates Österreich, vol. ii, Vienna, 1935.

sities with a degree has since 1930-1 further increased in some of the most important faculties, as shown in Table VIII.

TABLE VIII. *Number of Students leaving Austrian Universities and Faculties with a Final Degree*

Period from 1930-1 to 1933-4

<i>Institution or Faculty</i>	<i>1930-1</i>	<i>1931-2</i>	<i>1932-3</i>	<i>1933-4</i>
Law	581	571	583	668
Social Sciences	54	72	48	70
Medicine	360	449	521	442
Philosophy (Arts and Sciences)	763	834	947	1,053
Technical Colleges	493	423	467	433
Mining Colleges	54	68	74	48
Agricultural Colleges	100	94	57	87
College for World Commerce	222	229	307	271

The increase in the number of graduates of law and medicine and the arts and science faculties which prepare primarily for teaching is particularly marked. They can be seen in their true light by comparing the number of graduates with the number of available positions. In 1934 Austria had 8,416 practising physicians. One hundred and forty-four physicians died in 1933 and 138 in 1934. The number of physicians retiring every year is very small (663 of the 8,416 physicians in 1934 were above 65 and still in practice). It has furthermore to be considered that there are less than 800 inhabitants to each physician in Austria and that the establishment of new practices is for that reason almost impossible. If all these factors are taken into account it becomes evident that the supply of new candidates for the profession—400 to 500 per year—is out of all proportion to the demand for such candidates. It has not only in all probability led to an overcrowding of the medical profession at the present time, but augurs badly for most of those who are preparing for a medical career in Austria.

The situation of the law graduates appears for the moment to be equally difficult. The statistics show that 83 and 105 lawyers and public notaries died in 1933 and 1934 respectively. Most of the restrictions for entry into the public services are still in force and few graduates are absorbed into private business. Thus the difficulties of the 500 to 600 law graduates leaving the universities every year can easily be imagined. Yet their outlook for the future is not as dark as that of the physicians, as the various economy

decrees cannot be maintained indefinitely, and many law graduates are likely to find positions in industry and commerce as soon as the economic situation improves. In the meanwhile we find that roughly 10 per cent. of the article clerks with university training (*Rechtsanwaltsanwärter*) are unemployed, only 40 per cent. of whom are over 30. They will have to be absorbed before there is room for new-comers.

No detailed statistics could be obtained on the situation amongst arts and science graduates. All observers agree, however, that it is tragic. In so far as these faculties prepare primarily for the teaching profession their graduates are suffering acutely from the economy measures affecting schools. Dobrietsberger mentions even for the year 1932 that there are no openings for teachers of mathematics, physics, and modern languages. The combination of economy measures and of an increasing number of students with a degree seeking employment has made of the teaching profession one of the most overcrowded of all careers.

BELGIUM

In October 1935 the Conseils d'Administration of the Fondation Universitaire and the Fond National de la Recherche Scientifique set up a 'Commission for the Study of the Overcrowding of the Universities and the Unemployment of Intellectual Workers'. Early in 1936 the Commission published a report¹ which unfortunately gives only general conclusions, omitting the statistical details on which they are based. The report states that there is a large measure of unemployment amongst college and university graduates, particularly those who hold degrees of the Faculties of Philosophy and Arts (largely teachers), Law, the Theoretical and Applied Sciences. Unemployment amongst chemical engineers is practically non-existent. There is an over-supply of medical practitioners in the large urban agglomerations, compensated by a shortage of physicians in rural districts. The number of *sous-classés* is large. Curiously enough, while some of the professions in Belgium, chief amongst them teaching, are overcrowded, students show a strong disinclination to enter colonial careers, with the result that at times positions in the colonies requiring academically trained people remain vacant. The Commission demonstrates its

¹ *Commission pour l'étude du surpeuplement des universités et du chômage des intellectuels, Rapport Général, Bruxelles, 1936.*

belief that the overcrowding of certain professions is due to an overcrowding of the institutions of higher learning by advocating stricter methods of selection and a certain reorganization of the secondary schools which would relieve the pressure on the universities.

In the light of this report it appears that the overcrowding of the intellectual careers in Belgium is not as acute as in other countries. This was to be expected in view of the comparatively small increase in student enrolments between 1913 and 1934, as revealed in Table I. Incidentally it is interesting to note that the exceptionally heavy increase of the enrolments in the Arts faculty, shown in Table III, corresponds to marked unemployment in the teaching profession. On the whole, however, Belgium seems to suffer from a maldistribution (between urban and rural districts, the home country and the colonies) rather than an overcrowding of the professional field.

BULGARIA

In an inquiry made on behalf of International Student Service in 1931, Dr. C. Shishmanoff of the Ministry of Social Affairs in Sofia came to the conclusion that the market for secondary-school teachers with university training was saturated for some time to come and that the supply of young people with law degrees considerably exceeded the demand. Many of them had to be satisfied with inferior positions. Too many physicians were to be found in the large cities, while the provinces suffered from a lack of medical services. There was also a shortage of teachers for industrial and crafts schools which were to be developed. Engineers were suffering from the economic depression.

A later report submitted to the university conference in Belgrade in December 1935 (see p. 10) states that in 1935 most of the professions were overcrowded: 'While exact statistical data are not available, there are many symptoms indicating that all the careers for which the institutions of higher learning prepare are saturated. The universities in Bulgaria and in other countries where Bulgarians study produce more university-trained people than can be absorbed in public offices or by private enterprises.' Nevertheless, there are a few places requiring highly specialized training which could not be filled by Bulgarians, in spite of the general oversupply. Thus foreign experts had to be invited to meet the needs

for specialized engineers on the part of the growing textile industries and other industrial branches. On December 1, 1935, 555 university graduates were registered as being without work in the city of Sofia alone: 313 of them were under 30. Considering that only 792 students left the institutions of higher learning with a degree in 1934, the figure of the unemployed in the single city of Sofia is impressive.

The report, which unfortunately has not been published, insists that the unemployment amongst university graduates is not due to an 'over-production of intellectuals' but rather to the disastrous economic situation of the country:

'The need for university trained persons is so great that the annual supply of graduates could not satisfy it for many years to come. State and municipalities enlarge every year their cultural, social, and economic activities. Instead, however, of increasing their personnel, which would lead to the appointment of large numbers of university graduates, they are for budgetary reasons obliged to diminish it, which interferes with the accomplishment of their tasks and puts a heavy strain on the remaining officials and employees who have to work overtime. The situation is more or less the same in the private enterprises. As a result of the unbelievable decrease in the purchasing power of the population and the general impoverishment, private enterprises are obliged to liquidate or to restrict their activities, which in turn leads to the dismissal of their personnel.

'It is therefore evident that the unemployment of intellectual workers in Bulgaria is above all and fundamentally due to the economic crisis which exhausts the population from an economic point of view and leads to a complete dislocation of the labour market, characterized by a steadily augmenting volume of supply and a decrease in the demand for work which requires a higher education.

'Are we confronted with a passing phenomenon? A careful study of the state of public finance and of future economic prospects reveals that only an improvement in the price of agricultural products which would increase the purchasing power of the population by 85 per cent. would lead to a substantial increase in the effective demand for university graduates and their services. As long as the prices at home and abroad remain at the present low level, the economic life of Bulgaria will remain paralysed and the budgetary situation will remain precarious. The introduction of new crops attempted as a remedy proceeds only very slowly and is not likely to lead to a sensible amelioration of the conditions in the labour market, which depends on an all-round recovery. Without such a recovery all measures intended to reduce unemployment

in general or that of university graduates in particular will remain ineffective and insufficient.'

To give these remarks their proper weight it ought to be emphasized that in spite of the substantial increase in student enrolments in Bulgaria since 1913 there was only one student to approximately 760 inhabitants in 1934. This equals the ratio prevailing in Greece and represents, with the exception of Italy, a lower ratio than is found in any other continental European country under consideration.

CZECHOSLOVAKIA

The Czechoslovak Republic belongs to the group of countries which, created or greatly enlarged after the War, needed a large number of intellectuals to take the places held by the former rulers, whether Austrian, Hungarian, German, or Russian. Many of these countries suffered until 1925 and 1926 from a shortage of intellectuals amongst their nationals. Beginning with the second half of the twenties, however, the situation was reversed. Most of the available places had been filled, largely by young people who had every expectation of remaining in office or of carrying on their practice for thirty or more years to come. Notwithstanding this fact student enrolments continued to be high or even to increase, as has been shown in some detail in the case of Romania.¹ It is therefore not surprising that most of these countries are to-day complaining of an acute overcrowding of all those careers which require a college or university preparation.

Professor Jan Hejman of the Ministry of Education, our chief collaborator in Czechoslovakia, paints a forceful picture of the plight of the young intellectuals in his country. More than 1,000, or about 15 per cent. of all the available secondary-school teachers with university training, are waiting for positions and have waited for six or seven years. A rapid fall in the income of most lawyers is indicative of a considerable over-supply. Young physicians find it impossible to secure positions even in small provincial hospitals, which not so long ago were unable to secure candidates. The access to many branches of the civil service is barred. Unemployment in the technical careers is general, though a certain improvement which has taken place recently indicates that these careers have, above all, suffered from the economic depression.

¹ See pp. 48 ff.

On the whole, however, the overcrowding of the professions has to be traced to the over-supply of young graduates. Professor Hejman estimates that there are approximately 70,000 to 75,000 people with academic training in Czechoslovakia who are normally pursuing professional work. Assuming that their period of work is on the average 33 years, it is to be expected that approximately 2,100 places should fall vacant every year. On the other hand the university statistics show that in recent years 3,500 to 3,800 students of Czechoslovak nationality left the institutions of higher learning annually with a final degree. Considering that most of the gainfully employed intellectuals at the present time are only between 35 and 50 years of age, and that the demand caused by the need for replacement is therefore in all probability very much lower than 3 per cent. of the total, the seriousness of the situation is only too obvious. There has been a slight decrease in student enrolments during 1934 and 1935, but this decrease will only make itself felt in 1939 and 1940. As an interesting side-issue, Professor Hejman mentions that the overcrowding-crisis is leading to certain difficulties between Czechs and Slovaks in the country. Czechs used to study in larger numbers even before the establishment of the Republic, receiving their training mostly in Austrian universities, while the percentage of academically trained Slovaks was extremely small. Thus, during the first years after the War, many places in the Slovak part of the country had to be filled by Czechs. Since then the number of Slovak intellectuals has increased rapidly and they are now claiming positions. The lack of planning in education has thus led to a situation which is very difficult to adjust satisfactorily.

FINLAND

According to a letter from M. Niels A. Mannio,¹ Finland counted 3,500 'unemployed professionals' registered in the autumn of 1934. Of these unemployed 8 per cent., or roughly 250, had a university degree, 40 per cent. had degrees from commercial and trade schools and colleges. These figures do not tell the entire story, as the number of *sous-classés* is very large.

Early in 1935 the Government appointed a special Commission under the chairmanship of Professor E. Linkomies to study the

¹ Letter from M. Niels A. Mannio, Secretary-General of the Ministry of Social Affairs, to the author; dated Sept. 12, 1935.

problem and to report to the Government. The report was submitted early in 1936. It concludes that Finland, with one student per 438 inhabitants (1932), is educating too many people in its institutions of higher learning. During the years 1932-4 2,984 students left these institutions with a degree, as against 1606 during the period 1920-2. The annual supply of new graduates exceeds the demand by roughly 350. The Committee proposes, amongst other measures, the general application of a *numerus clausus*, reducing the number of first-year students by 25 per cent.¹

FRANCE

The successive Ministries of National Education in France have since 1933 taken an active interest in the problem of the unemployment of intellectual workers, and especially of the graduates of institutions of higher learning. M. de Monzie established within his Ministry the Bureau Universitaire de Statistique, the direction of which was entrusted to M. A. Rosier, the chief French collaborator in our inquiry, to whom we owe most of the information on France reproduced in this report.² In spite of the assiduous efforts of M. Rosier and the extent to which public discussion has been devoted to our problem in recent years, very little information is available. The French are particularly reluctant to approach intellectual questions, or what they consider to be *des problèmes de la culture*, with quantitative methods. They have a tendency to be concerned rather with the definition of such terms as *chômage des intellectuels* than with discovering its actual extent. Thus professional statistics on which to base any sound evaluations are practically absent. We are therefore obliged to fall back upon

¹ S.E.L.L. *Nachrichten*, no. 3, May 2, 1936, pp. 5-6.

² M. Rosier published a first survey of the situation in France in 1934 under the title *Du Chômage intellectuel, de l'encombrement des professions libérales* (Librairie Delagrave, Paris, 1934). Since then he has furnished us with a number of reports giving the latest developments.

Several French newspapers, responding to the keen interest of the French public in matters intellectual and affecting intellectual life, have conducted extensive surveys of their own, witness the series of articles published in 1935 by Lucien Romier in *Le Figaro*, the articles by P. Vaillant-Couturier in *L'Humanité*, the inquiry of *Le Temps*, of *La France de l'Est* at Mulhouse, articles in *L'Écho de Paris*, *Le Petit Marseillais*, and others. Finally, mention must be made of the numerous articles on the problem published by M. Charles Pomaret, of whose efforts as a member of the French lower house to combat the unemployment of intellectuals more will have to be said later.

general estimates, of which those obtained by M. Rosier appear to be the soundest.

M. Rosier, in a report to the author,¹ divides the various professions which normally require some form of academic training into four groups: those which are overcrowded; those which suffer from maldistribution; those which are on the whole overcrowded but still offer opportunities for certain types of specialists; and finally those in which there is a shortage of candidates. In 1936 the following professions or careers in France belonged to the first group, suffering from acute overcrowding: public teaching, journalism, nursing, judiciary, public administrative positions in the city of Paris. The official statistics of examinations indicate that 1,775 licences giving the right to teach in secondary schools were granted in 1934. Of the 1,775 only 723, or less than half, had found positions in 1935—a corroboration of the fact that the situation in the teaching profession is particularly difficult.

The second group, in which there is a maldistribution either between the city and the land or the home country and the colonies, comprises: teachers in private institutions, doctors, pharmacists, dentists, veterinary surgeons, practising lawyers, and architects. To give only one example of the existing maldistribution, M. Rosier mentions the situation in the medical profession. France has one physician to 1,650 inhabitants, which does not seem unreasonable when compared with the figure of less than 800 inhabitants per physician in Austria. Paris, on the other hand, has one physician to 630 inhabitants, while the city of Melun, some 40 miles from Paris, counts 1,168 inhabitants to one physician, a figure which grows to 1,971 in the rural districts of the Département de Seine-et-Marne, which also is close to Paris.²

To the third group belong the various branches of engineering.

¹ Letter of March 2, 1936.

² We reproduce these figures with some hesitation, as comparisons of this kind, which have been made for other countries also, may be somewhat misleading. A city like Paris counts a large number of specialists who serve the whole of the country or at least large regions round Paris. To be really convincing, any such comparison should therefore enumerate specialists and general practitioners separately. Even then a somewhat higher percentage of practitioners in the urban agglomeration might only reflect the greater need for medical service in the big cities. While we are, therefore, inclined to concur with M. Rosier that a certain measure of maldistribution exists—various medical authorities confirm it—it is obvious that it is not as acute as one might be led to believe in the light of the above figures.

They still offer a few opportunities to very highly specialized engineers. As a whole, however, the profession is struggling with acute unemployment, due no doubt largely to the prolonged economic depression, which in France shows few signs of giving way. Yet the economic crisis is not alone responsible for the present state of affairs. Even before the depression set in, 10 per cent. of the engineers were without work, while about 50 per cent. were definitely *sous-classés*. Rosier, citing such experts as Professor Urbain of the Sorbonne and M. Guignard, Dean of the Science Faculty in Lyons, traces this fact to the irresponsible multiplication of all kinds of engineering schools, whose standards are low and which flood the market with diplomas.

The fourth group, in which there are still openings, comprises the career of the actuary, the higher forms of banking and insurance operations, and some administrative careers in the provinces.

The overcrowding of some of the professions in France, even where it is more apparent than real, as in the case of the medical profession, can be traced to the very rapid increase in student enrolments which took place after 1925. Some of that increase corresponded to a real demand. Thus, while the number of doctors in France had risen between 1866 and 1911 only from 11,254 to 20,113, it grew from about 24,000 in 1926 to 25,400 in 1931—an increase of 5·8 per cent. in five years. But when one learns that during the same five years the number of medical students of French nationality rose from 7,336 to 10,242, or by 34·6 per cent., one needs no further explanation of the fact that, pending a better distribution of available physicians over the whole of France and the colonies, complaints are frequent about the overcrowded state of the medical profession.

At the same time the effects of the economic depression must not be underrated. France is a highly centralized country, with a numerically strong civil service, including the majority of teachers. Economy measures taken by the Government have therefore an immediate effect on a large section of the population. The Décret Chéron of January 1, 1933, closed temporarily the entry to most of the state careers in France, affecting thousands of young university graduates. It was rescinded in April 1934, only to be replaced by the Décrets-Lois d'Économies, which reduced the number of all state officials, both civil and military, by 10 per cent.

These economy measures alone meant the suppression of 74 posts at the Sorbonne and of 131 places in provincial universities, and this at a time when the universities could hardly cope with the number of new students. Even to-day some sections of these economy laws reducing the number of officials and rendering more difficult the employment of younger people have not been revoked. Those who have prepared themselves for a state career in recent years, whether in teaching or in the administration, continue to wait.

GERMANY

The available material on Germany is prolific. With a thoroughness worthy of the cause government offices, university authorities, semi-official and private organizations, and a large number of experts in education, economics, and social questions have, beginning with the second half of the twenties, investigated every conceivable aspect of the relation between student enrolments and the prospects for intellectual workers. Before 1933 three agencies led these efforts: the Volkswirtschaftliche Zentralstelle für Hochschulstudium und akademisches Berufswesen in Kiel, the Deutsche Studentenwerk in Dresden, and the Arbeitsgemeinschaft für Akademische Studien- und Berufsberatung in Berlin. The organization in Kiel, under the direction of Dr. Georg Keiser, was not only entrusted with the evaluation of the *German University Statistics*, a standard work appearing twice a year since 1928,¹ but specialized in a systematic study of the prospects, immediate and future, in the various professions. The results were published between 1932 and 1933 in a series of monographs dealing with the professional prospects of physicians, dentists, pharmacists, architects, &c.² These monographs are remarkable both for their methods and for the wealth of information they contain. The Deutsche Studentenwerk in Dresden did much to popularize the findings of the Volkswirtschaftliche Zentralstelle and had in the persons of Dr. Reinhold Schairer and Dr. Hans Sikorski two experts whose writings on the subject—the titles alone fill pages³—

¹ *Deutsche Hochschulstatistik*, herausgegeben von den Hochschulverwaltungen, Verlag Struppe und Winkler, Berlin, 1928—.

² *Untersuchungen zur Lage der akademischen Berufe*, herausgegeben von den Hochschulverwaltungen, Verlag Struppe und Winkler, Berlin, 1932–3.

³ For a full bibliography up to and including 1932 see Reinhold Schairer, *Akademische Berufsnot*, loc. cit., pp. 159–64.

awakened public opinion to a realization of the dangers of overcrowded universities and congested careers. The Arbeitsgemeinschaft, in Berlin, under Dr. Walter Wienert has been publishing since 1930 *Studium und Beruf*,¹ an excellent running commentary on the situation in the institutions of higher learning and in the professions. Amongst the individual contributions the work of Dr. Wilhelm Hartnacke² has to be mentioned, because it represents most closely the national-socialist point of view. With the advent of the new régime the Volkswirtschaftliche Zentralstelle in Kiel was closed and the Deutsche Studentenwerk (Reichsstudentenwerk since 1934) lost the collaboration of Reinhold Schairer and Hans Sikorski and concentrated on the social and economic aspects of student life. *Studium und Beruf*, however, continues to appear and to be the best source of information on contemporary developments.

In 1933 most experts were agreed that the supply of new graduates exceeded by far the existing vacancies and the new positions that were being created. It was estimated that the total number of positions requiring academic training in Germany was between 300,000 and 350,000. Incidentally, it is an indication of the deplorable state of professional statistics, or rather of the difficulty of compiling such statistics, that even in Germany it was and still is impossible to give more exact figures. Taking the figure of 350,000 as a basis, and estimating the yearly demand at 3 per cent. of the total, it was concluded that Germany needed every year 11,000-12,000 graduates.³ On the other hand, it was

¹ *Studium und Beruf*, Nachrichtenblatt zur akademischen Berufskunde und Berufsberatung, Berlin, 1930-.

² Dr. Wilhelm Hartnacke, *Naturgrenzen geistiger Bildung*, Leipzig, 1930; idem., *Bildungswahn — Volkstod*, Munich, 1932.

³ This method of evaluating the demand for new candidates is open to various criticisms. Chief amongst them is the fact that it does not take into account the grouping by age of gainfully employed persons, which varies from profession to profession, and from country to country. The case of Czechoslovakia has shown that the younger age-groups may hold a disproportionate number of positions (disproportionate in relation to the frequency of the various ages in the total population) with the result that the demand for replacements may be considerably below the average figure. On the other hand, it is conceivable that the replacement demand may be higher in a profession which some forty years ago underwent a period of very rapid growth—as e.g. engineering did in the years of great industrial development in the nineties—and where the losses owing to death or retirement thirty years later are likely to be above the average. The method, furthermore, does not take into consideration the 'expansion demand', i.e. the additional demand owing to an increase in population, new industrial developments, &c. In a period of economic stagnation, however, it can be

found that on an average 25,000 students left the universities and technical colleges with or without degrees each year from 1929 to 1933, or at least double the number actually required. Most of them had full degrees, as the 'mortality' of students during those years was estimated at 20 per cent. at a maximum. Elaborating on these general conclusions it appeared that a 'reserve army' of intellectual workers, an intellectual proletariat, was rapidly growing up. It was generally held that it reached the 40,000-50,000 mark in 1933. In the absence of unemployment statistics for professional persons the exact number will never be known. It was certainly substantial. More specialized studies revealed that the overcrowding was general and absolute, i.e. that no profession had escaped it. Up to the second half of the twenties there were good prospects for physicians and dentists. This fact, combined with the overcrowding in other careers which was already making itself felt, led to a flooding of the faculty of medicine. The number of medical students increased between 1925 and 1930 from 7,700 to 18,000, while the increase among students of dentistry was even more impressive—1925: 1,053; 1928: 3,274; 1929: 4,541; and 1930: 5,417. In this way, and following the principle of communicating vessels, all the faculties were 'filled up' until the oversupply of graduates in all fields caused a complete congestion of the ways leading to gainful work.

The measures taken by the National-Socialist Government in April 1933, which will be analysed in another chapter, reduced within three years the total student enrolments by nearly 40 per cent., and the enrolment of first-year students by almost 55 per cent., as compared with 1930. These drastic measures ended the 'overcrowding' of the German universities. In spite of various other emergency measures and the absorption of a considerable number of graduates in military careers, the German Government was, however, not able to overcome the unemployment problem amongst intellectual workers. Considering the scope of the problem, it could not be expected to lessen appreciably in the short period of two years, particularly as the inflated student classes from 1928 to 1932¹ entered on their graduation period only in 1933 assumed that this rough and ready method leads to results which are not too misleading.

¹ The number of first-year students was in the years 1928/9: 30,684; 1929/30: 30,520; 1930/1: 30,806; 1931/2: 29,706; 1932/3: 24,514; 1933/4: 20,829; 1934/5: 13,889.

and after. Even the large-scale dismissal of Jewish and other professional men and women did little to relieve the situation, except in a few professions. The discussion of these and other measures must also be reserved for a later section.

In the meanwhile we are only concerned with the actual economic position of the professions in Germany. It is not reassuring, judging by the reports of continued lack of work for law graduates and secondary-school teachers. Professor Noack¹ comes to the conclusion that the supply of law graduates is still far in excess of the existing demand. The total number of judges and attorneys in Germany (1935) is 6,411, whereas 5,542 candidates with state diplomas (*Assessoren*) were waiting for permanent positions. In 1934, 2,649 new *Assessoren* passed the examination in Prussia alone, while the annual demand can be met by 250. This disproportion is likely to continue for a series of years owing to the high enrolments in the law faculties. It means that approximately 2,350 *Assessoren* every year, and for some years to come, have to find positions outside the careers of the judge or the attorney. Some will find places in industry, commerce, and other fields, but it is expected that approximately 2,000 a year will attempt to establish themselves as legal practitioners, a branch of the profession in which approximately only 1,000 vacancies occur every year. Thus the supply exceeds the demand by roughly 1,000. The income of lawyers has been reduced to a fraction of what it was in 1928. In that year the average income of lawyers (legal practitioners) according to an inquiry of the Statistical Office was RM. 18,428 (4,388 gold dollars). In 1933, 41.9 per cent. of the legal practitioners had a taxable income of less than RM. 3,000 (714 gold dollars): 17,245 had an income of less than RM. 15,000 (3,810 gold dollars), while only 1,535 reached an income superior to that amount.

The situation amongst secondary-school teachers is, if anything, worse. According to *Studium und Beruf*² the number of graduates in Prussia admitted to teaching, but without permanent positions, increased from 2,132 in 1930 to 4,964 in 1934. Not even half of them hold temporary positions in public schools. The outlook for women is particularly discouraging. The number of women with permanent positions in the secondary schools of Prussia is

¹ Professor Noack, *Hilfe für die Anwaltschaft?* Leipzig, 1935.

² Loc. cit., vol. v, Dec. 1935, p. 169.

1,627 compared with 1,670 women graduates waiting for permanent positions.

A definite 'improvement' has, however, taken place in the medical profession, largely owing to the displacing of a large number of Jewish physicians, of whom more than 1,300 have emigrated, while many more whose practice has been ruined continue to live in Germany. *Studium und Beruf*,¹ quoting from an article by Dr. Dornedden ('Deutschlands Ärzteschaft', in *Deutsches Ärzteblatt*, 1935) reports that between 1932 and 1935 roughly 3,500 physicians were admitted to practice. Yet the total number of physicians increased only by 125, owing to the emigration of Jewish physicians and taking into account that 2,086 physicians died during this period. In relation to the total population the proportion of physicians has even decreased (8 per 10,000 population in 1934 and only 7.92 in 1935). In some parts of Germany, such as Upper Silesia and West Prussia, there are only 4.6 and 4.7 physicians respectively per 10,000 inhabitants.

The conditions in the engineering profession have greatly improved. As in all countries this profession was the first to suffer from the economic depression, being particularly subject to changes in business conditions. For years the profession in all its branches had to put up with acute unemployment and very low incomes. The industrial recovery—whether temporary or permanent, need not be discussed at this point—led by the armament industries created as early as 1934 a great demand for engineers. 'Technik und Kultur'² not only points out the increased demand in 1935 but states that the supply of recent graduates is exhausted. Incomes, however, remain low for the time being and unemployed engineers above 40 find it difficult to be reabsorbed.

These few examples may suffice. They indicate that the unemployment amongst intellectual workers is no longer general in Germany. There is some hope again for students who are now preparing themselves for a career. In some professions, however, the situation still remains grave.

GREAT BRITAIN

Compared with most countries on the European continent, professional men and women in England can still be counted amongst

¹ Loc. cit., vol. v, July-Aug. 1935, p. 95.

² See *Studium und Beruf*, vol. II, Sept. 1935, p. 122.

in beati possidentes. During the worst of the depression in 1931 and 1932 some professions, chiefly that of the teacher, suffered from a degree of unemployment. The teaching situation had been made worse by the fact that the expected raising of the school-leaving age was not carried through, and that many teachers who had been trained with that in view remained without work. Since then matters have improved considerably. Early in 1935 Mr. Ramsbotham, replying to a question in the House of Commons, was able to point out that of the 7,459 students leaving training colleges and university training departments in July 1934 5,875 were reported to have obtained posts. He expected that the remainder would be absorbed within six months.¹ Since then the Bill to raise the school-leaving age to 15 has been passed and has led to an additional demand for teachers.

While it has not been possible to obtain adequate information about all professions, all the available material goes to show that the situation in other professions is at least as satisfactory as in that of teaching. The medical register since 1914 shows a steady increase in the number of doctors qualifying each year. The number of medical practitioners rose to more than 57,000 in 1935, or roughly one physician to 800 inhabitants. On the other hand very small incomes are no rare occurrence, and it appears that the saturation-point—at least in relation to the present social and economic conditions in Great Britain, which determine the demand for medical practitioners—may be reached before long. For the moment young graduates are still able to make a living, even if very modest at times.

Solicitors and barristers are not recruited from university graduates only. Only 25 per cent. of the solicitors come from the university. The percentage of university graduates amongst the barristers is considerably higher. At present the majority of candidates who prepare for call are graduates or undergraduates. As it is to be expected that lawyers without a university training will very gradually be replaced by graduates, the outlook for law students is hopeful. Furthermore, the demand for solicitors is increasing owing to the development of municipal boroughs, &c. The general conclusion is that no able young solicitor need lack employment.

Until 1931 any one could practise as an architect, no matter

¹ *Manchester Guardian*, Jan. 30, 1935.

whether he was qualified or not. By an Act of Parliament passed in 1931, however, no architect may practise unless he possesses one of the recognized qualifications (F.R.I.B.A., &c.). A university degree is in no way essential to an architect, but a fairly large number of students at the schools of architecture have previously taken a university degree in another subject. At some universities (e.g. Cambridge) it is possible to take a degree in architecture. The chief schools of architecture have an appointments register for students wishing to be placed in posts on leaving the school. The Architectural Association places on an average 300 qualified architects per annum. During the slump this figure dropped to about 150, but the following years showed a marked rise. On the whole, all views concur that prospects are good, and that no able young architect finds it difficult to obtain employment.

Particularly interesting and most important for the future is the development in business. Both Mr. O. V. Guy, Secretary of the Cambridge University Appointments Board, and Mr. H. J. Crawford, Secretary to the University of London Appointments Board, agree that a gradual change in attitude is taking place in the business world and that the employers are beginning to realize that it pays them to engage a university man.¹ Thus new and promising fields are opening up for college and university graduates.

These examples, taken from a few professions and careers, fully corroborate the general evaluation of the situation made by such authorities as A. M. Carr-Saunders and the University Grants Committee. The latter arrives in its last report² at the conclusion, based on information supplied by the university authorities, 'that the actual amount of unemployment amongst students is, as regards the country as a whole, not large. On the other hand it may well be the case that, though employment has been obtained, it may not be particularly suitable, involving a sense of frustration on the part of the employee, with a consequent loss of efficiency.' Professor Carr-Saunders writes:³

'There is no very serious overcrowding of any profession in England. This is due to the fact that the tradition about universities is quite different from what it is abroad. There has never been any idea of going to a university to attain status in general. Formerly one went to Oxford

¹ H. J. Crawford, 'The Graduate in Business: A Review and a Forecast', in *The Journal of Careers*, vol. xiv, no. 148, Jan. 1935, pp. 33 ff.

² *Loc. cit.*, p. 30.

³ Letter to the author, July 1935.

or Cambridge to have a good time. Now one goes if it helps one to get a job. At the newer universities there is hardly any one who has not come up knowing what he wants to do and who has not found out that there is a reasonable chance of his finding a post. It is more or less possible to discover the likelihood of getting a position because of the organization of the professions, which keep a sharp lookout on recruitment (keep employment registers, for instance). Furthermore, the professors know quite well what the chances are in their own line, and the knowledge of incipient overcrowding spreads quickly and causes a decline in the number enrolling in that subject. . . . In England a university is just a place where by paying so much you prepare yourself for a certain career, and no sane man is going to put down this money unless he hears that the career requires recruits.'

The situation in Scotland and Wales, which are not characterized by the same utilitarian attitude to education, is less satisfactory. It will be remembered that there is one student to every 1,013 inhabitants in England, while the proportion in 1934/5 was 1 to 741 in Wales and 1 to 473 in Scotland. To refer again to the inexhaustible fund of information made available by the University Grants Committee:¹

'Both in Scotland and in Wales it has been less easy for students trained for teaching to find posts in schools. In Scotland we believe the position is now correcting itself, and it is noteworthy that during the last two or three years there has been a sensible diminution in the number of students at the Scottish Universities. In Wales we fear that equilibrium has not yet been established. In other words, there is a longer delay there in teachers becoming absorbed in schools, as well as a certain amount of actual unemployment among other university graduates.'

The situation would be worse were it not for a certain measure of migration of graduates of these two countries to England.

An inquiry made by Mr. Thomas A. Joynt, Registrar of the University of Edinburgh, supports this statement as regards Scotland. The inquiry was undertaken during 1933 with the aid of funds provided by the Carnegie Corporation of New York through the Scottish Council for Research in Education and its results published in the *University of Edinburgh Journal*.² Of 372 men and 384 women, representing 85 per cent. of those who graduated

¹ Loc. cit., p. 30.

² Thomas A. Joynt, 'Graduates and Employment', in *University of Edinburgh Journal*, July 1934, pp. 242-6.

from the Faculties of Arts and Science of Edinburgh University in the sessions 1929-30 and 1930-1, 280 men and 263 women were in employment, 40 men and 15 women were continuing study or training other than apprenticeship, and 52 men and 106 women were unemployed in the period July-December 1933. Of those unemployed, 42 men and 85 women had trained as teachers. These figures clearly reflect the difficulties, particularly in the teaching profession. An appreciation of more recent developments is contained in a letter from Mr. Joynt, written for the purposes of our inquiry on June 25, 1935, from which we quote as follows:

'In the absence of similar figures for the graduates of more recent years, it is difficult to say anything too definite regarding the present position. But it is generally accepted that there has been considerable improvement due to a number of factors. There has been an appreciable reduction in the number of students at the Scottish Universities and particularly at the two largest, Edinburgh and Glasgow. This has been particularly noticeable in the Faculty of Arts and has been due first to general economic conditions and secondly to the fact that during the last three years all the Training Colleges for Teachers have introduced a quota system for graduate entrants. Our faculties of Medicine have restricted the number of entrants, not for reasons of prospective unemployment, but simply because of the natural limits of laboratory and clinical equipment. Simultaneously there has been, particularly during the last eighteen months, considerable improvement in the demand for graduates for business employment at home and overseas. During recent years also, at least in Edinburgh, students have come to consult the University Appointments Committee in much larger numbers and at an earlier stage than formerly, and it has been possible to advise them more adequately regarding appropriate appointments. School-teachers I think have also paid more attention to the problem of employment.'

HOLLAND

In 1933 the Dutch Committee of International Student Service urged the setting up of a Commission to investigate the rapid growth of unemployment amongst college and university graduates in Holland. Largely owing to the untiring efforts of Mr. D. J. Cramer,¹ the Secretary of the Committee, this Commission came

¹ D. J. Cramer died in South Africa on June 6, 1936, at the age of 27. We mourn in him a friend and co-worker whose vision, intelligence, energy, and unselfish devotion have been an inspiration to all those who had the privilege of knowing him.

into being on October 28, 1933. It was composed of seventy-three members, including State officials, professors, representatives of professional organizations, and students, and sat under the Chairmanship of Mr. J. Limburg, Member of the Council of State. Thirteen sub-committees studied the situation in the various professions. The general plan of the inquiry was elaborated by Dr. Ph. Idenburg, the Director of the Department of Educational Statistics of the Central Bureau of Statistics at The Hague. A report was published¹ early in 1936, which with its 630 pages takes its place among the best and most comprehensive studies published in any country. Most of what follows is based on this report, which in Holland is known as the 'Limburg Report'.

Dr. Idenburg estimated in 1934 that the annual demand for graduates due to deaths and retirements was in the neighbourhood of 600, considering that the total number of gainfully employed graduates was roughly 20,000 (23,000 in 1935).² The Limburg Commission, taking into account actual mortality statistics and the grouping of professional men and women by age, arrived at the conclusion that only 540 graduates were needed every year to meet the demands for replacement. On the other hand, it estimated that the annual demand due to expansion in all the professions requiring some form of higher studies was between 210 and 230. Thus, taking the larger figure for the 'expansion demand', 770 new graduates per year can hope to find work for which they were trained. On the other side of the ledger we find that the number of students leaving the institutions of higher learning with a degree increased from 540 in 1918-19 to 1,485 in 1933. In other words the supply is at present nearly twice as large as the demand.

It would lead too far to reproduce in any detail the findings of the various sub-committees on each of the professions. The Limburg report tabulates the final results, indicating the probable proportion between demand (due both to replacement and to expansion) and supply for the period 1935 to and including 1939 (see Table IX).³

¹ See p. 7.

² Philip J. Idenburg, *Stude, Crisis, Studiecrisis*, Amsterdam, 1934, p. 9.

³ Loc. cit., p. 597. For a short summary of the Limburg Report see Dr. Philip J. Idenburg, 'L'Étude statistique du marché de travail des diplômés universitaires aux Pays-Bas', in *Revue de l'Institut International de Statistique*, no. 2, 1936.

TABLE IX. *Demand and supply for and of college and university graduates in Holland, 1935-9*

<i>Subject</i>		<i>To a demand = 100 corresponds a supply =</i>
Theology		100 (125)
Law		195
Medicine		150
Dentistry		345
Physics		190 (120)
Chemistry		320
Biology		210
Pharmacy		350
Teachers		260
Veterinary Surgery		125 (60)
Economics		(125) ¹
Engineering (Delft) excl. Chemistry		180
Agriculture		120
Total		190

While the report emphasizes repeatedly and rightly that the figures given in Table IX represent estimates—in the case of theology, physics, and veterinary surgery and the professions corresponding to these studies considerable divergencies of opinion became obvious in the course of the inquiry—it is nevertheless certain that the rapid increase in student enrolments in Holland has led to an over-supply of young graduates in nearly all the professions. The Commission in estimating the probable demand for the next four years took every care to discount the temporary depression on the market of intellectual work due to the economic crisis.

To complete the picture it may be added that the income of intellectual workers in Holland has greatly decreased in comparison with the income of manual workers. R. A. Verwey, the Director of the Central Bureau for Unemployment Insurance and Placement, reports that the index figures (1914 = 100) for the incomes of a baker and the head of a government department receiving his maximum salary in 1935 were 264 and 131 respectively.²

On the other hand it is noteworthy that the proportion of graduates in professional work is comparatively speaking very much smaller in the Netherlands than it is in Germany. It has

¹ As the careers in business and elsewhere are particularly subject to economic fluctuations this figure is altogether tentative.

² R. A. Verwey, 'De Werkloosheid der Hoofdarbeiders', in *Tijdschrift van den Nederlandschen Werkloosheids-Raad*, vol. xviii, Amsterdam, 1935, p. 198.

been mentioned that from 300,000 to 350,000 gainfully employed people in Germany have had a higher education. Considering that the population of Holland is one-eighth of that of Germany the figure of from 20,000 to 23,000 'intellectuals' may be regarded as low. Whether the share of academically trained people will increase beyond the expectations of the Limburg Commission—perhaps particularly in business, thus following the example of England—only the future can show.

HUNGARY

Hungary is the only country under consideration which, as has been pointed out, had fewer students in 1935 than in 1913. Yet it figures amongst those countries which suffer most from the unemployment of intellectual workers. This is partly explained by the dismemberment of Hungary after the War. The same universities which before the War served nearly 19 million people are now serving less than 9 million; while before the War there was one student to 1,174 inhabitants, there are now only about 550 inhabitants per student. To this has to be added another fact. While the redistribution of Europe caused an acute demand for university graduates in such countries as Rumania, Czechoslovakia, and many other 'new' countries, Hungary had to take over large masses of officials, teachers, and other professional men who had been working in the provinces which were lost under the Treaty of Trianon. They were all crowded together on the small territory of the new Hungary, with disastrous results on the market for intellectual labour. A census made in 1928 revealed that 53,514 academically trained people held jobs of some kind or another, while 10,034 were unemployed.¹ In other words agricultural Hungary had at that time approximately one university graduate per 136 inhabitants, as compared with one graduate per approximately 200 inhabitants in industrially highly developed Germany, a country which was itself complaining about the crisis in the professions. These figures need no commentary.

The situation has changed but little since 1928. The number of degrees issued has remained steadily above the number of places which have fallen vacant owing to death or retirement. In spite of a slight decrease in student enrolments approximately 3,200 students graduate every year, while the replacement demand, even

¹ Aladár Haász, *loc. cit.*

on the basis of the inflated figures of 1928, is estimated by Ladislav Acsay to be in the neighbourhood of 1,600 per annum.¹ The actual number of unemployed, not to speak of the *sous-classés*, is not known. It is certainly very high, though a number of them have found positions in the army. In 1934 the Government created 1,600 emergency posts offered to unemployed graduates under 36 (or 40 if they had served in the War). The salary offered was 12 gold dollars per month, and those who accepted had to sign a declaration that they were not counting on any kind of promotion. In spite of these conditions and restrictions, more than 3,200 graduates meeting all the stipulations applied within a few weeks.² It needs little imagination to visualize the misery lurking behind these cold figures.

Notwithstanding these facts it has been established that there are certain agricultural districts in Hungary which can still absorb certain types of intellectual workers. More will have to be said later about the measures taken or envisaged to take advantage of these opportunities.

INDIA

Reference has been made in previous sections to the acute unemployment amongst the educated middle classes in India. The mere fact that some nine or ten commissions have been set up in various parts of British India during the last ten years to study the problem testifies to the extent of that unemployment. Unfortunately it is not possible to give any statistics which would not be misleading, as the reports on India but rarely make the distinction between graduates of secondary schools and those of colleges and universities. The degree of unemployment amongst college and university graduates has therefore to be judged by inference, using the number of unsuccessful applications for jobs in various government departments and elsewhere as a basis.

The evidence taken by the Sapru Commission in the United Provinces (see p. 80) revealed that the competition for any kind of government job is extremely keen. In 1934-5 eight posts for excise inspectors at a salary of Rs. 80 per month brought 463 applications, 338 of which came from college and university

¹ Ladislav Acsay, *Que faire pour les jeunes intellectuels sans emploi?*, private print, Budapest, 1933.

² Dr. Celta Königes, *Bericht über die Lage der stellenlosen Diplomierten in Ungarn*, Report prepared for the purposes of this inquiry, Budapest, 1934.

graduates.¹ Mr. S. T. Hollins, Inspector-General of Police in the United Provinces, stated in his evidence that 700 persons applied in 1934 for 60 vacancies (subordinate clerical positions), amongst them 200 college and university graduates.² Mr. R. C. Srivastava, of the Imperial Council of Agricultural Research, estimated that 'very few, not more than 10-15 per cent., of the educated men are probably absolutely unemployed', but the number of those having inadequate employment is not likely to be below 60 to 70 per cent. On this basis approximately only 20 per cent. of the educated classes have employment in keeping with the standard of their educational qualifications.³

Not all professions suffer equally from unemployment. It is worst amongst the rank and file of graduates in liberal arts courses; next come law students and to a smaller extent medical graduates. The need for better medical services in the villages is acute, but physicians tend to congregate in the large cities, where living-conditions are better. In the words of the Sapru Report:⁴

'... there is a considerable amount of unemployment prevailing in the medical profession in these provinces, due to the tendency of the medical practitioners to congregate in big towns, where the remuneration is higher than in the rural areas, though precise figures are not available.'

'... it is necessary that medical men should be persuaded to settle down in rural areas in larger numbers, and for this purpose it is necessary to subsidize them on a more generous scale than has hitherto been done.'

'There is a shortage of trained dentists, as quacks 'sometimes are responsible for incalculable injury to the innocent patients'.⁵

The situation in the various engineering professions, in commerce, and in chemistry is very much better. Civil engineers have had a difficult time in recent years owing to a conflict of authority between the Central Government and the District and Municipal Boards, which practically led to a suspension of new appointments. Apart from them, however, engineers have on the whole found it possible to secure positions. The same applies to chemists, whose salaries, however, owing to exploitation on the part of employers, are very low. The Sapru Commission itself suggests: 'The remedy for these trained scientific employees is to organize themselves, to

¹ Sapru Report, loc. cit., p. 30.

³ Ibid., pp. 31-2.

⁴ Ibid., p. 58.

² Ibid., p. 28.

⁵ Ibid., p. 67.

enable them to deal effectively with unsatisfactory and unsympathetic employers.¹ The chances of employment for engineers and for graduates of commercial courses could be further improved in the opinion of the Commission if, apart from the theoretical work, they were given a better practical training.

Very much the same conditions seem to prevail in other parts of British India. The Report of the Government of Bengal Unemployment Inquiry Committee states:²

'The evidence which has been placed before us to the effect that there is considerable unemployment among the Anglo-Indians of Bengal and among the educated middle-class Bengalis is overwhelming, and we have been greatly impressed by the acuteness of the problem and the urgent necessity for the adoption of measures for the alleviation and removal of the present distress and for the prevention of any aggravation of the present condition of affairs in the future.'

At the same time there is a shortage of well-qualified teachers. The Commission quotes from the Sadler Report (vol. v, p. 328):³

'A serious deficiency in the numbers of well-qualified teachers is the fundamental weakness in the system of secondary and intermediate education. It is also the cause of an enormous waste of money and time. There is urgent need in Bengal for many thousands of well-trained teachers, equipped with a sound knowledge of what they have to teach and with a clear comprehension of the aims and methods of a good school. . . . If the teaching were improved the school life of the average high school boy would be shortened by two years.'

The Report of the Commission in Madras which sat in 1926, using a method of computation which since then has been applied in various European countries, comes to the conclusion that the ratio of supply and demand of and for graduates in Madras is 2 to 1:⁴

'The number of pupils leaving school and college each year, from Form III to the final University Class, for the last five years is computed by Mr. Statham at 14,000. Against this must be set the number of vacancies available each year. Such a number is hard to get at. But according to actuarial calculations the annual occurrence of vacancies in any class of employment is 4 per cent. The total number of workers given in the last census under the head "State service, local bodies,

¹ Ibid., p. 46.

² Loc. cit., p. 4.

³ Loc. cit., p. 20. The Bengal Report was published in 1934; we are told, however, that there is still a lack of *qualified* teachers at the present time.

⁴ Loc. cit., p. 4.

lawyers, teachers, clerks of all kinds including accountants", is 175,000. This does not include medical men in private practice, engineers, dyeing, weaving and agricultural experts, &c., not employed by the State or Local Bodies, but unfortunately the number of these is not so large as materially to affect the calculation. This figure may be taken approximately as the number of posts in occupations in which the educated middle class is engaged. The number of vacancies likely to occur annually being 4 per cent. of 175,000, the proportion of educated men seeking employment to the demand for them is thus roughly two to one.

The Punjab report also comes to the conclusion that there is a considerable over-supply of university graduates:¹

'This general conclusion [that there is an over-supply, *Ed.*] is supported, so far as graduates are concerned, by the evidence given by Mr. Woolner in his capacity of Secretary to the Punjab University Appointments Board. Careful inquiries made by the Board in 1915-16 led to the conclusion that the annual output of graduates was just about being absorbed. At that time about 400 B.A.'s and B.Sc.'s were graduating each year, but the average annual out-turn is now between 700 and 800, and Mr. Woolner estimated that this number was about 200 in excess of requirements.'

Very similar statements can be found in the reports of the Commissions in Bombay Presidency (1927) and in Travancore (1928). They all go to show that there is considerable unemployment or under-employment (*sous-classés*) in many professions; that it is due primarily to a maldistribution of graduates over the various professions and also between urban and rural areas; and finally—more will have to be said of this later—that this maldistribution can be traced to a wrong emphasis in education (too much stress on higher literary and theoretical studies) which leaves the masses of the people illiterate, while there is a growing class of intellectual workers who find it impossible or are not inclined to live in rural areas where their services would be most needed.

ITALY

Italy has in recent years had little unemployment in the professions. Actual statistics are lacking—the general complaint heard in all countries. The satisfactory situation is due to the comparatively small number of graduates leaving the institutions of higher learning every year—approximately 9,000, of whom more than

¹ *Loc. cit.*, p. 7.

2,500 every year are absorbed in government positions; to the rapid economic development of the country since the World War, which, while it did not improve the general standard of life, brought many new industries into existence designed to achieve the 'autarky', i.e. the self-sufficiency, of the country, for which Mussolini has been increasingly striving; and finally to the fact that during the last eighteen months to two years large numbers of young people have been continually kept under arms. It is hoped in Italian circles that many of these young people, including graduates, will as they are dismissed from the army find work in the new Empire.

Yet there seems to be a certain measure of maldistribution here, too. Giorgio del Vecchio in his report, written before the African expedition, points¹ out that the agricultural provinces of the south send a large contingent of students to the universities, few of whom study such subjects as agriculture or veterinary science, in which field there is a need for candidates, particularly in view of the Government's determination to colonize the waste land in Italy. On the other hand too many prepare themselves for state positions, which is fully understandable in a country in which the State means everything. Anticipating a later chapter, it is interesting to note that the corporations and the national and local organizations of the Fascist Party which stand next to the Government have seen themselves obliged to create new positions for university graduates who could not find official government posts.

JAPAN

Our analysis of the development of student enrolments has shown that student numbers in Japan have grown more rapidly than anywhere else. In 1934 the Japanese universities had more than seven times as many students as in 1913. To this increase in enrolments corresponds an increase in graduations. Owing to the reorganization of higher education after 1919, no comparable pre-War figures of diplomas issued are available. A publication of the Central Government Employment Bureau in Tokyo, dated March 1935,² contains, however, not only full indications about the

¹ Loc. cit., p. 20.

² We owe a great debt to Dr. Iwao Ayusawa of the Tokyo Branch of the International Labour Office, and to Professor Kamii of the I.L.O. in Geneva, for giving us access to this publication, which unfortunately has appeared only in Japanese.

number of graduations since 1925 but also complete data on the unemployment situation. According to this report the number of graduates from all types of institutions of higher learning increased $3\frac{1}{2}$ times between 1925 and 1934, viz. from 6,133 to 15,048. In reality the increase has been less marked, as certain schools were included in 1934 which were not included in 1925. Nevertheless, the increase in the number of graduates per annum has been very substantial and continues for the time being.

It is therefore not surprising that, in spite of the stupendous industrial development of Japan during the last fifteen years and the expansion of its political sphere on the mainland, the country has not been able to absorb all these new graduates. The Central Employment Bureau keeps a close record of the graduates actually placed every year, the figures being furnished by the institutions of higher learning, which keep in contact with the graduates. From this record it appears that the percentage of graduates who found positions in the year of their graduation, as shown in Table X, has decreased considerably since 1925.

TABLE X. *Employment of college and university graduates in Japan during the year following graduation, 1925-34*

(In percentages of the total number of graduates)

	<i>Employed</i>	<i>In independent positions</i>	<i>Doing post-graduate work</i>	<i>Unemployed</i>	<i>Others</i>
	1	2	3	4	5
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
1925 . .	66.6	..	8.7	12.4	12.3
1926 . .	59.1	5.9	..	24.9	10.1
1927 . .	64.9	6.0	5.3	14.9	8.9
1928 . .	53.9	6.0	5.4	25.9	8.8
1929 . .	50.2	5.2	6.6	21.2	16.8
1930 . .	42.2	5.7	11.1	41.0	
1931 . .	36.0	6.0	12.0	25.6	20.4
1932 . .	38.4	6.1	10.5	22.7	22.3
1933 . .	42.7	5.4	10.9	21.5	19.5
1934 . .	44.9	6.6	10.8	19.9	17.8

The lesson of this table is plain. The first column, giving the percentage of those who found employment, is the most revealing as it reflects most clearly the situation on the labour market. We note a more or less steady decrease from 1925 to 1931—the year

when the economic crisis reached its climax in Japan—followed by a substantial improvement in 1932-4. The third column, giving the number of those who went in for post-graduate studies, gives the inverse picture: the percentage of post-graduate students is highest during the years of the depression in the labour market. It is unfortunate that nothing is known about those who help to swell the percentages in column 5. It can be assumed, however, that a large section of them are to be counted as unemployed. In 1930 the official statistics actually record the two groups, i.e. 'unemployed' and 'others', in one. The increase in the number of unemployed needs no emphasis.

The table also allows of the conclusion that the diminishing chances of employment for graduates are due to an over-supply of graduates rather than a decreasing demand for their services. The years from 1925 to 1929 were years of prosperity and expansion; nevertheless, the percentage of those who found employment during these years shows a marked decline. Some absolute figures will help to make this clear. The number of graduates who found employment within the first year of graduation actually increased between 1925 and 1929 from 6,133 to 10,126. The number of graduates leaving school increased during the same period from 9,208 to 22,959.

The burden of unemployment was unevenly distributed over the various professions and careers. Table XI indicates for the years 1925-34 what percentage of graduates of some of the chief faculties found employment within the year.

The advantage which the sciences, engineering and agriculture, have over law and economics is obvious. While the chances of employment of law and social science graduates diminish sharply until 1931, and improve only gradually during the years which follow, we find not only that the graduates in science, engineering, and agriculture suffered less during the depression but that their chances of employment have recovered more quickly since. To all intents and purposes there is no unemployment in these fields to-day. The medical profession is becoming gradually overcrowded and the chances for finding a livelihood in medicine are diminishing. Japan had in 1934 roughly 45,000 physicians or one physician per (approximately) 1,050 inhabitants. If both graduates of medical schools and the total population continue to increase at the present rate there will be one physician to every 500 inhabitants

THE 'UNEMPLOYMENT' OF

in ten years from now. The official statistics unfortunately offer no information on the degree of unemployment amongst candidates for the teaching profession for the years after 1929. We are informed, however, by our Japanese correspondent, Professor Kakehi, that this profession has to be classed to-day amongst those which suffer most acutely from overcrowding.

TABLE XI. *Employment of graduates in Japan (within year of graduation) according to faculties*

(In percentages of the total number of graduates in each faculty)

	<i>Law and Social and Political Sciences</i>	<i>Science and Engineering</i>	<i>Agriculture</i>	<i>Medicine and Pharmacy</i>	<i>Teaching</i>
	1	2	3	4	5
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
1925 . .	56.6	80.6	57.5	75.5	97.1
1926 . .	52.9	79.9	63.1	59.1	80.0
1927 . .	65.7	76.2	60.7	73.1	89.5
1928 . .	46.3	73.3	49.5	69.3	86.0
1929 . .	38.1	76.0	58.6	70.5	70.9
1930 . .	39.0	60.9	57.1	45.5	..
1931 . .	30.2	52.4	51.2	48.5	..
1932 . .	30.6	59.0	51.3	49.2	..
1933 . .	36.6	65.4	62.4	46.5	..
1934 . .	38.4	74.6	61.4	47.4	..

The admirable publication of the Central Employment Bureau also contains a table showing the shifts in the average monthly income of graduates obtaining their first employment. According to this table the average monthly income of recent graduates who have found employment in business and banking institutions decreased from 80.10 yen per month in 1927 to 65.77 yen in 1929. From 1930 to 1934 the averages are given separately for employees in the administrative branches (law and social science graduates) and for technical experts. For the first group the average incomes decreased from 69.45 yen to 65.52 yen per month, while the corresponding figures for technical experts are 77.75 yen and 72.82 yen respectively. These figures do not necessarily indicate a lowering of the price of intellectual labour—to determine this question they would have to be compared with the general indices for prices and wages—but they do reflect the greater demand for technically trained people revealed in the last table.

LATVIA

In 1933 Mr. Anskar Schnore of the University of Riga contributed a report for the purposes of our inquiry, from which it appears that at that time the professions in Latvia were in danger of becoming rapidly overcrowded. The total number of professional men and women gainfully occupied was in the neighbourhood of 7,000, to whom corresponded nearly 8,500 students in the institutions of higher learning. Though the 'mortality' amongst students was high, many of them leaving the university without a degree, the supply of graduates every year numbering approximately 500 greatly exceeded the demand due to death and retirement, which was estimated to be roughly 200 per annum. At the same time the demand due to expansion, which was very considerable after the War, Latvia being a new country, was shrinking rapidly, partly owing to the economic depression and chiefly because of the large number of new positions which had been filled between 1920 and 1930. Many graduates were taking positions which did not require university training.

The report is particularly interesting because it points out a phenomenon which is evident also in a country like Switzerland: the lessened chances for emigration of university graduates (in Switzerland especially many engineers emigrated before the War). Of the very much smaller number of graduates from the University of Riga before the War, more than half found employment in the vast regions of Russia, where an urgent need and the best possible prospects existed for academically trained persons. After the War, not only did emigration to Russia become practically impossible, but any emigration to overseas countries came to a complete standstill. This closing up of an important avenue to gainful work obviously aggravated the situation in Latvia.

Since the report of Mr. Schnore was written, far-reaching measures have been taken by the Latvian Government both to procure work for graduates and to reduce student enrolments, with the result that the Latvian Ministry of Social Affairs was able to inform the Institute of Intellectual Co-operation in Paris in 1935 that the unemployment of young graduates had ceased to be a problem in Latvia.¹ More of this anon.

¹ 'Mesures prises pour combattre le chômage des intellectuels', in *Coopération Intellectuelle*, nos. 55-6, Paris, 1935, p. 419.

SWEDEN

On March 22, 1933, Mr. Anderson, representative for Norrköping, asked the Minister of Education, Mr. Engberg, in the Swedish Parliament whether the Government was going to act upon a suggestion made by the student body of the University of Upsala, to investigate the prospects for employment of university graduates and to bring out a report which might help the students and their parents in the choice of the student's career. A lively discussion followed, which resulted in the autumn of 1933 in the appointment of two experts, Professor Sven Wicksell of Lund and Tor Jerneman of Stockholm. Having brought the whole apparatus of scientific investigation into play, they completed their report in September 1935.¹ It contains a most careful analysis of the numerical development of higher education in Sweden from 1900 onwards, paying special attention to the increase in the number of diplomas issued and attempting a forecast in the light of recent trends. It gives by age the numbers of professional people gainfully occupied, figures which in the absence of complete professional statistics had to be secured with the help of some thirty professional organizations. The same organizations also provided indications as to the actual unemployment in their professions in 1934 and 1935 and information about average incomes. On the basis of all these data and a detailed consideration of mortality rates and yearly retirements the authors of the report attempt to determine the probable future demand, due both to death and retirement and to increasing needs for professional services. They come to the conclusion that, at least as far as the next few years are concerned, the intellectual careers in Sweden will suffer from a considerable measure of overcrowding, due primarily to an oversupply of graduates. Their findings are summarized in Table XII.²

The first column, estimating the supply of graduates, is based on the present enrolments, i.e. it applies to the period ending 1939 or 1940. Column 2, estimating the demand due to death and retirement, applies to the same period, while column 3 indicates that this demand will grow as time goes on owing to the fact that the number of professional people increased continuously during the last generation. To the comparatively small number of persons

¹ See p. 7. We are greatly indebted to Miss Kerstin Berggren of the University of Lund for the translation of the most relevant sections of the report.

² Loc. cit., p. 370.

who some thirty years ago graduated, and who established themselves or found employment, corresponds a small demand due to death or retirement at the present time. That demand is bound to be very much larger when the graduates of the twenties and early thirties who were absorbed into gainful professional work reach their limit of life or activity.

TABLE XII. *Supply of and demand for graduates of institutions of higher learning in Sweden*

(Absolute figures)

Subject	Supply of new graduates (estimate on basis of present enrolments)	Demand due to replacement (near future)	Demand due to replacement (over longer period)	General estimate of demand due to expansion
	1	2	3	4
Theology	130	65	85	Small
Law	170	110	150	Rather large
Medicine	150	50	85	Considerable
Philosophy and Arts, including teachers in secondary schools	385	100	250	Moderate
Engineering	200	50	80	Limited
Engineering	270	100	170	Large
Surveying	20	10	10	Limited
Veterinary Science	15	10	15	Very small
Dentistry	140	20	55	Considerable
Pharmacy	40	40	45	Limited
Forestry	15	10	20	Small
Economics	110	10	45	Large

While the demand due to needs for replacement can be pretty accurately calculated, the two Swedish experts feel that the possible additional demand—due to economic changes, new inventions, a better appreciation of medical services, the extension of educational facilities, and many other factors whose development it is difficult to foresee—is so uncertain that it cannot be determined quantitatively. In other words they are not prepared to go as far as the Limburg Commission in Holland, which attempted to predict this additional demand at least for the period ending 1939. Yet their statements, as given in column 4, that the additional demand is likely to be 'small', or 'large', or 'limited' indicate general trends and become really helpful when read in conjunction with the very detailed explanations given. If one reads, for instance,

that according to the official statistics there is only one physician per 2,428 (1932) inhabitants in Sweden, and that various measures are being contemplated to increase medical facilities in all parts of Sweden, one feels not only that the authors of the report are justified in expecting a considerable increase in the number of places for physicians, but that the future of recent medical graduates is not as hopeless as might be concluded from a simple comparison of columns 1, 2, and 3. Again the fact that the possibilities for expansion in the teaching profession (secondary schools) are 'limited', while the actual supply of graduates greatly exceeds the demand due to simple replacement, can be taken as an indication of a real overcrowding.

On the whole it appears from the report that, as has been stated, there is likely to be a not inconsiderable increase of unemployment or under-employment amongst Swedish graduates during the next few years; that, provided student enrolments do not continue to increase at the present rate, the situation will improve after that period; and that even in spite of such improvement certain professions will remain overcrowded unless, by way of a better distribution over the various faculties or by other measures, student enrolment in faculties preparing for these professions can be reduced.¹

SWITZERLAND

Unemployed college and university graduates in Switzerland are entitled to apply to the cantonal employment exchanges and to the Federal Labour Department in Bern for help to find work in the same way as unemployed workers of any other category. While most of the unemployed intellectual workers do not take advantage of this right—particularly those who count on establishing themselves in independent practice—a substantial part of them appears in the official statistics. In 1935 the Federal Office of Industries, Arts and Crafts, and Labour reported that approximately one thousand persons belonging to the professional groups requiring some form of higher education had registered since 1933.²

¹ It is obviously impossible to do justice in a few paragraphs to the report of Sven Wicksell and Tor Jerneman, remarkable both for its methods and its results. We hope that it may soon be translated and thus be made available to a wider public outside Sweden.

² 'Mesures prises pour combattre le chômage des intellectuels', in *Coopération* 1935, pp. 422-3.

Unfortunately this figure is not very helpful, not only because it obviously covers only a section of the unemployed intellectuals, but also because, on the other hand, it includes to a large extent persons who have not had a full college or university training.

More relevant and reliable information has been secured through an inquiry carried out in 1935 by the University of Zürich under Professor H. von Meyenburg, then Rector of the University. The University of Zürich is not only the largest Swiss university, but as it is of particularly high standing and located in the largest city in Switzerland, it may be assumed that any difficulties in finding work encountered by graduates of the University of Zurich apply to the same or an even larger extent to the graduates of other Swiss universities.

During the months of March and April 1935 the University of Zurich sent a questionnaire to all its Swiss graduates of the years 1930-4, soliciting the following information: (1) occupation since graduation, i.e. whether established in independent practice or employed; if employed, whether in a permanent or a temporary position; if unemployed, whether wholly or partially; (2) income at time of answering questionnaire, i.e. whether sufficient, not altogether sufficient, insufficient, or no income; (3) type of work obtained, i.e. the degree to which the work obtained corresponds to the training received. One thousand one hundred and sixteen questionnaires were sent out, of which 974 or 87.2 per cent. were returned, a very high percentage, emphasizing the representative character of the inquiry. The answers revealed that of the 974 graduates replying: 210 (21.6 per cent.) had established themselves in independent practice; 332 (34.1 per cent.) had found permanent employment; 163 (16.7 per cent.) had secured temporary employment; 186 (19.1 per cent.)—mostly medical graduates—had positions as assistants in institutes and clinics (partly unpaid); 14 (1.4 per cent.) were doing post-graduate work; 14 (1.4 per cent.) women graduates did not want to exercise their profession; 43 (4.4 per cent.) were totally unemployed, while 12 (1.2 per cent.) were partially unemployed. In the light of these figures it appears that the number of those who were actually unemployed was very low.

The importance of the inquiry resides, however, in the answers to the questions concerning income and suitability of work. These answers show that the 'unemployment' amongst intellectual

workers takes the form of insufficient incomes and under-employment (*sous-classés*) rather than total unemployment. Only 343 (35.3 per cent.) had an income sufficient to live on, 93 (9.6 per cent.) had an income not altogether sufficient, 264 (27.2 per cent.) considered their income insufficient, to whom have to be added 186 (19.1 per cent.) who had assistants' incomes, which are on the whole very small. Seventy-nine (7.9 per cent) had no income at all, while 9 (0.9 per cent.) did not reply to the questions regarding income.¹ Seven hundred and ninety-five (81.8 per cent.) declared they had found work in the line of their training, 60 (6.2 per cent.) found their work only partially suitable, 48 (4.9 per cent.) had secured work not in line with their training, while 71 (7.2 per cent.) had no gainful occupation. Even if these figures are not pressed too hard, owing to the latitude allowed the graduates to determine themselves the degree of sufficiency which their incomes had reached, it is obvious that the number of those who were not able to make a sufficient living and the proportion of the *sous-classés* was very much larger than the number of the actually unemployed. These findings bear out the assumption—and this applies as a general rule to all countries—that simple unemployment statistics for professional people are a very inadequate means of determining the economic status of the professions and the degree of their overcrowding.

As it is not relevant for the purposes of our international study we do not intend to enlarge on the differences in the position of graduates of the different faculties. Suffice it to say that the prospects for graduates of the Arts and Science Faculty, as revealed by the Zürich inquiry, are particularly bad. While, of the total number of graduates of all the faculties who replied, only 5.6 per cent. were wholly or partially unemployed, we find that 10 per cent. of the science graduates were wholly without work and 14.8 per cent. of the graduates of the arts courses (humanities) were wholly or partially unemployed. Of the graduates of the two branches of this faculty 12.2 and 20 per cent. respectively had no income, as compared with only 7.9 per cent. of the graduates of all faculties, while 14.8 and 13.9 per cent. respectively were *sous-classés*, as compared with only 4.9 per cent. of the total number of graduates.

¹ These figures lose somewhat in weight owing to the fact that the questionnaire did not define the term 'sufficient income', but left it to the judgement of individual graduates to determine what he meant by it.

Similar figures exist for the graduates of the Polytechnical School in Zürich, which for years has kept in close contact with its former students. Unfortunately many of these figures are not available for publication. Suffice it, therefore, to say that the degree of unemployment amongst the graduates of the Polytechnical School has in recent years been greater than amongst the university graduates, partly because they were more directly affected by the economic depression and partly because of the growing restrictions on emigration to other countries. In pre-War years and even after the War Swiss engineers, because of their exceptional qualifications, due to the very high standards at the Polytechnical School, were sought after in all parts of the world. To-day they are amongst the chief victims not only of the economic depression but of a barren nationalism which is more interested in passports than in qualifications.

U.S.A.

The United States of America are the country of committees and commissions, of research councils and institutes, of congresses and study conferences, of inquiries, surveys, and investigations, of reports and monographs, the country in which newspapers and magazines vie with colleges and universities in educating the public on everything that is supposed to be worth knowing. The desire to learn and to understand which is reflected in all these efforts is magnificent: the results, alas, are less satisfactory. It has become practically impossible to find one's way through the jungle of publications of every kind dealing with so large a subject as the unemployment of college and university graduates and related problems. Much of the material produced is irrelevant, more of it deals with such narrow aspects of our problem, or is based on surveys of such small areas, that it does not help to arrive at any evaluation of more than local importance. The detail outgrows the whole. Other material is definitely coloured by the wishful thinking of its authors, who represent various interests, whether those of the professional organization, the employer, or the politician. Synthetic studies, viewing the entire problem and seeing it in its national and historical setting, are conspicuous by their absence.

This is not said in any spirit of criticism. Europeans overlook only too easily the tremendous spaces which separate the various

parts of the United States from each other, nor do they appreciate the great differences which exist between these parts. The United States themselves are only slowly reaching the point where they begin to consider themselves as one great unit, divided into forty-eight states and yet one. It is to be hoped that, as this realization grows, the American organizing genius will devise ways and means to co-ordinate research on a national basis, to turn the jungle of unrelated researches and publications on social and educational problems into a wood which the investigator endeavouring to measure its depth and extent will be able to enter without fear of losing his way at every turn. This is an aspect of 'educational planning' which deserves more attention than it receives at present, but which obviously falls outside the scope of this report.

Under these circumstances any generalizations must of necessity be very tentative and should be taken as such. They will be useful only in so far as they indicate the direction which further and better co-ordinated efforts at research might take.

One point is obvious. In talking of the status of college and university graduates in the United States, a difference has to be made between the graduates of liberal arts colleges and the undergraduate courses of the universities on the one hand, and the products of post-graduate and professional schools of college rank on the other. The latter educate primarily candidates for definite professions, e.g. the medical profession, the various engineering professions, or to a lesser degree the profession of law. The former, on the other hand, give above all a general education, though they may include certain 'vocational' courses, training the students in certain skills. These 'skills' are usually themselves of a general type supposed to fit the student for a great many careers. There are, of course, some exceptions to this general rule, the main one being the work accomplished by the undergraduate institutions for the training of teachers. In so far as they enrol students who pursue the definite plan of training for a teaching career, these undergraduate institutions have to be assimilated to the other professional schools, and their graduates will be subject to the laws of supply and demand which are in operation in the market for professional labour.

It follows from this distinction that even so rapid an increase in the undergraduate enrolments as America has witnessed during the last twenty years does not necessarily cause an overcrowding

in the professions. It may of course lead to it if a very large number of college students after graduation turn to the graduate schools. For the time being the majority of American college students terminate their studies with graduation. They marry or they find employment of some kind or they remain unemployed. If they remain unemployed, the crucial question arises whether they remain unemployed *because* they have been to college. Only if this question can be answered in the affirmative is it justifiable to speak of the unemployment of college and university graduates *as distinct* from the general unemployment problem. In other words it would have to be proved that college graduates find it more difficult as a result of the training they have received to secure employment than those who have not had a college training. The greater difficulty might be due either to the existence of an 'academic complex' on the part of the graduate, who thinks himself too good to accept anything but certain high and well-paid types of work, or to a deformation of his general abilities which renders him incapable of doing anything but certain forms of white-collar work.

It is probably true to say that the American colleges cannot on the whole be accused either of creating the 'academic complex' or of destroying the student's ability to enter practically any kind of job which does not need a prolonged and highly specialized training. There are few or no traces of the *Verbildung* which characterize the products of many European institutions of higher learning. The American college graduate is ready to put on an overall and to accept practically any kind of job offered him. Even if he has to accept some menial job in a filling-station he probably does not feel himself *sous-classé*, because he will only consider it as a stepping-stone to greater things. In this he is not mistaken. There can be no doubt that the well-educated college graduate has even to-day a real chance to get ahead, and that his chances are better than those of his fellows who did not have the privilege of a college education. In 1931 and 1932 the American Management Association produced one of the few available general reports on the prospects of college graduates, which contains some very pertinent information on this point.¹ It states that 60 per cent. of the country's graduates were in business of some sort or other.

¹ 'The Supply of and Demand for College Graduates', in *Personnel*, vol. viii, nos. 3-4, New York, 1932, pp. 67 ff.

They were increasingly holding responsible and well-paid positions. In 1910 only 21 per cent. of the supervisory staff and professional positions were occupied by college graduates. That share grew to 23.3 per cent. in 1920 and to 26.6 per cent. in 1930. It was estimated at the same time that by 1940 they would hold 33.9 per cent. of these positions. It would be futile to quarrel about decimal points—the very personnel of the group which made these statements and estimates, composed as it was of some of the most outstanding business experts in America, lends weight to them.

Under these circumstances we are justified in assuming that whatever unemployment existed amongst college graduates in recent years was primarily due to the depression. Recent reports fully bear out this contention. *Occupations* of March 1936¹ quotes Mr. W. Emerson Gentzler of Columbia University as saying that 75 per cent. of the June 1935 graduates had found work by September 1935. The same article mentions that of 460 Princeton graduates 170 had found employment by September 1935. Only 46 remained unemployed, as the rest had either gone in for further studies or were otherwise occupied. Trinity College, Hartford, reported only 5 per cent. of its graduates unemployed. The 1936 outlook appears to be even better. In a recent article in the *New York Times*² Mr. Robert F. Moore, Secretary of Appointments, Columbia University, refers to a nation-wide survey of sixty-one leading universities and technical schools,³ indicating 'that compared with 1935 employment opportunities have doubled for the class of 1936, and that salaries are higher by an average of \$10 per month. Although a few schools reported only a 20 per cent. increase in employment calls, several institutions can show increases of 200 to 500 per cent. Starting salaries have returned to the pre-depression average of \$100 per month, with many companies paying as high as \$125. Mr. Moore believes that early in the autumn 90 per cent. of the 1936 class of Columbia will be started in business.

However, a few reservations must be made. There are obviously

¹ 'College Graduates', in *Occupations*, The Vocational Guidance Magazine, March 1936, p. 582.

² Robert F. Moore, 'Jobs for the Graduate', in *New York Times*, May 31, 1936.

³ *Report: Employment demand for University graduates of 1936*, prepared by Family Economics Bureau, North-Western National Life Insurance Company,

failures amongst college graduates. Some might have failed whatever education they were given. Yet there are others who became failures because they went to college. We have already spoken of them; of their inability to live up even to the minimum intellectual efforts required in college; of the sense of failure which seizes them as they grapple with tasks they are unable to master. Better methods of selection might have guided them into channels and occupations more germane to their natural gifts. They are indeed *verbildet*, distorted.

Furthermore, it is inevitable that the number of well-paid, responsible jobs to which college graduates aspire in turning to business are limited under the present economic system. The saturation-point has not been reached, but is bound to be reached some day, when the supply of college graduates will exceed the demand not only in the more highly paid positions but even in the lower forms of 'white-collar' work. At that time the American ideas of education will be put to an extreme test. College graduates will have to accept menial positions, knowing that they are not a stepping-stone, and that they can hardly expect to reach executive positions in the business world or elsewhere. If at that crucial point they remain satisfied, happy in the possession of the general education and the skills college gave them, then much of the American dream of a happier and fuller life will be realized. Incidentally America will have a newsocial order, in which education rather than wealth will be considered the highest good, education for its own values and not as a means to acquiring wealth. That hour has not come yet, but one wonders whether, in view of the test which is to come some day, both colleges and their students should not be directing their efforts towards a clearer understanding of the final and inevitable results of present-day educational philosophies and policies.

Turning to the graduates of professional schools and highly specialized courses, we are in danger of losing ourselves in conjecture. With all their marvellous research equipment the United States have so far not produced anything which could be compared with the work accomplished in Holland or in Sweden, with either the Limburg or the Wicksell Report. As an emergency project to give work to unemployed 'white-collar' workers a study is being made at present of the 'Economic Status of Alumni'. We are told that twenty-five institutions of higher learning have already

declared their willingness to co-operate in this scheme, carried out under the auspices of the Office of Education and under the supervision of Dr. Walter Greenleaf.¹ It does not seem to be the intention, however, to make a survey comparable to those of the two European countries mentioned. In the absence of such a general study of the situation in the professions and of their economic prospects we have to fall back on the occasional surveys and studies of individual professions—'occasional' being a very inadequate term, for the number of these surveys is legion, and so are their findings.

In such professions as medicine, architecture, or engineering, which require a prolonged and highly specialized training, it is essential that those who have undergone such training should find work in their own particular field. A substantial over-supply of young graduates not only threatens the economic status of these professions and their standards, it also constitutes waste of capital and energy, for many of those who have been trained partly at the expense of society and often with great sacrifice to themselves will not be able to render the highly specialized services for which they have qualified. Whether this point has been reached by any profession in the United States is another question.

In his epoch-making report on Medical Education in the United States and Canada,² Abraham Flexner spoke of an enormous over-production of uneducated and ill-trained medical practitioners. The report was indeed epoch-making because it did more than anything else to crystallize the efforts for a better organization of the medical profession and the improvement of medical education. It is due to this better organization that we are to-day more fully informed about the medical profession than about any other group. Yet even here it has to be said, *es schwankt ihr Bild in der Geschichte*. The *Final Report of the Commission on Medical Education*³ suggests that the profession is overcrowded or at least is very near that point. It emphasizes that the supply of new graduates greatly exceeds the demand due to the decrease of practising physicians, as shown in Table XIII.

¹ *School and Society*, June 6, 1936, p. 766.

² Abraham Flexner, *Medical Education in the United States and Canada*, A report to the Carnegie Foundation for the Advancement of Teaching, Bulletin No. 4, New York, 1910.

³ *Final Report of the Commission on Medical Education*, Office of the Director

TABLE XIII. *Death of physicians and graduates of approved medical schools in the U.S.A.*¹

	1929	1930	1931	1932
Death of Physicians . . .	2,797	2,943	2,952	..
Graduates of approved medical schools in U.S.A. . . .	4,446	4,565	4,735	4,936

In addition, 250-400 graduates of foreign medical schools were at that time approved annually by the various state medical boards. Considering that at that time the proportion of physicians to total population was 1 to 787 one might feel that the still unsatisfied demand could not possibly absorb the 2,000 and more additional physicians every year. Nor can there be any doubt that the position of many medical practitioners during the depression period was very difficult.

On the other hand we possess authoritative statements that the medical needs of the American people are far from satisfied and that under present circumstances they cannot be satisfied owing to the high cost of medical services. The Committee on the Costs of Medical Care, whose report appeared with an introduction by Ray Lyman Wilbur, then Secretary of the Interior, contains some highly significant data on this subject.² In quoting from Rollis H. Britten³ it shows that the death-rate of insured people belonging to the poorer classes is considerably higher than the death-rate of the more well-to-do groups (Table XIV):

TABLE XIV. *Death-rates from all causes, excluding accidents (United States)*⁴

Occupational class	Death-rate per 1,000
Professional and semi-professional . . .	3.27
Skilled	3.67
Semi-skilled	4.53
Unskilled (exclusive of farm labourers) . .	4.77

This table is, of course, not conclusive evidence that the higher death-rate amongst the poor is due to a lack of medical care.

¹ *Final Report of the Commission on Medical Education*, loc. cit., pp. 91-2.

² *The Costs of Medical Care*, University of Chicago Press, Chicago, 1932.

³ Rollis H. Britten, 'Occupational Mortality as Indicated in Life Insurance Records for the years 1915-26', in *Public Health Reports*, vol. xlv, no. 22, May 1930.

⁴ *The Costs of Medical Care*, loc. cit., p. 40.

THE 'UNEMPLOYMENT' OF

Malnutrition and poor housing-conditions obviously claim their toll of lives. However, if read in conjunction with another table of the same report it becomes evident that a lack of adequate medical care has something to do with the higher death-rates. This further Table (see Table XV) reveals that the percentage of persons with small incomes who do not benefit by regular medical services is indeed considerable. The data given in the Table are based on the records for 38,668 individuals in 8,639 white families surveyed in 12 consecutive months (1928-31).

TABLE XV. *Individuals who receive no medical, dental, or eye care (United States)*¹

Family income				Percentage who received no care
Under \$1,200	.	.	.	46.6
\$1,200-2,000	.	.	.	42.2
2,000-3,000	.	.	.	37.3
3,000-5,000	.	.	.	33.4
5,000-10,000	.	.	.	24.4
10,000 and over	.	.	.	13.8
All incomes	.	.	.	38.2

We further learn from the report² that the geographical distribution of medical practitioners is very uneven. In 1930 there was only one physician to every 1,431 inhabitants in South Carolina as against 1 to 282 in the district of Columbia. While physicians in the district of Columbia certainly serve a wider territory than Washington, and while the strain and excitement of politics may require a high degree of medical attention, it can be assumed that the district of Columbia is very much better served than the population of South Carolina. The Committee also points out that there is a maldistribution as regards general practitioners and specialists. It is estimated that the number of specialists charging high fees could be reduced by 40 per cent., while the number of general practitioners should be increased.

The report even goes so far as to attempt a calculation of the optimum number of medical practitioners required in the United States, and arrives at the conclusion that on the basis of 1929 approximately 174,000 physicians would be necessary to give the medical care required by the people of the United States 'if their

² *I. oc. cit.*, pp. 196 ff.

physical and mental defects and disorders are to receive preventive, diagnostic, and therapeutic treatment consistent with present-day standards of adequacy.¹ The actual number of practitioners in 1929 was in the neighbourhood of 142,000.

Many of these figures and estimates have been hotly contested and it cannot be the task of this report to determine to what extent they are right or wrong. Yet we have given them in some detail, as they offer an excellent example of the kind of problems which have to be faced if an adequate answer is to be given to the question whether a profession is overcrowded or not. The final answer cannot be arrived at by the physicians alone, some of whom might be tempted to put the maintenance of monopoly prices for their services above the common weal. It will need the assiduous efforts of economists and social workers, co-operating with the medical profession, to determine to what extent existing medical needs can be met by offering medical services at a price attainable for those who now have to go without it, on the understanding of course that the practitioners themselves must be assured of a reasonable income and that the best possible standards must be safeguarded. Only when the possibilities offered by medical insurance or other forms of socialized medicine have been fully and dispassionately explored will it be possible to discover whether the medical profession in the United States is overcrowded. Simply to point out existing needs is not enough. The ways and means to satisfy them are determined by the economic structure of the time and by the social order within which the professional services are to be performed.

Space forbids us to give a detailed account of the situation in other professions, even as far as the limitations of available relevant data would permit. We have to be satisfied with a few very short, and for that reason superficial, characterizations which may serve as examples and nothing more. The legal profession seems to have come close to a state of overcrowding, though the number of lawyers in proportion to the population of the continental United States has actually decreased from 151 per 100,000 inhabitants in 1900 to 133 in 1910, 125 in 1920, and 140 in 1930.² The number of students in approved law schools was on the decrease between

¹ Loc. cit., p. 222.

² Alfred Z. Reed, *Annual Review of Legal Education*, 1933, The Carnegie Endowment for the Advancement of Teaching, New York, 1934, p. 60.

1918 and 1932, when a slight upward trend became noticeable again. These figures reflect certain improvements in the organization of the legal profession and the certification of law schools, resulting in stricter requirements for admission to the Bar. The motive power behind many of these changes has been the admirable work accomplished by the Carnegie Foundation for the Advancement of Teaching and its reports on legal education and related problems. Notwithstanding all these efforts, there are ample signs that there are too many lawyers or—and this is perhaps more correct—that there are still too many insufficiently qualified lawyers. They endanger the standards of the profession, and the complaints about 'contingency lawyers', 'ambulance-chasers', 'fee-splitters', and other undesirable elements in the profession are numerous. During recent years there were also many lawyers who found themselves quite unable to earn a living in their profession. According to a statement of Mr. John Kirkland Clark, Chairman of the New York State Board of Examiners,¹ the County Bar Association in June 1930 opened an employment bureau for unemployed lawyers, which during the eight months ending February 1931 handled 3,000 cases of lawyers out of work. In February 1931 the bureau was forced to close, as during the time of its existence it had only been able to secure 40 positions. Mr. Clark estimated that the number of lawyers in New York was roughly 18,000, of whom not more than 10,000 were making a decent living, i.e. earning at least \$2,000 per annum. While the depression was partly responsible for this state of affairs he expressed the opinion that there were far too many lawyers, even judged by normal conditions. He also deplored the fact that too many young people were preparing for the law profession not because they felt a calling for it but because—mistakenly—they were attracted by the hope of a lucrative career.

Similar complaints are made in the survey of the situation in California² undertaken by H. C. Horack and Will Shafroth. It points out that the number of lawyers in proportion to the population of California is 1 to 562 (1933) as against 1 to 1,190 in Pennsylvania, a State which for some time has been discussing the introduction of a quota-system to counteract the 'overcrowding'

¹ Statement made late in 1933 to Mr. Peter Rhodes, a collaborator in the inquiry.
² Survey of Legal Education and Admissions to the Bar in California, in

of the Bar. While approximately only 280 lawyers were removed for one reason or another from active practice every year (1929-32) in California, nearly 600 new lawyers were admitted annually. This over-supply is largely due, according to the report, to the faulty system of legal training:

'It is evident that as long as 20 schools operate in the state without restrictions, California will continue to be overcrowded with lawyers. When only the four schools whose students have the highest records of success in the Bar examinations have been furnishing an average of 212 persons to the Bar each year, or three-fourths of the number required for replacement of those dropping out, it seems apparent that some of these twenty schools have but little excuse for existing.'¹

In spite of this apparent overcrowding of the Bar, we are not prepared to say that even from the point of view of supply and demand too many people in the United States receive a legal training. A comparison with European countries shows that a large number of law graduates in Europe find positions in the various branches of the civil service, for which they are eminently qualified by their legal training. America is likely to see great developments in its civil service in the years to come, and it seems likely that new careers will open up to law graduates. Similarly, more thorough provisions will have to be made to assure the necessary legal aid to poor people unable to pay high fees to a lawyer in order to secure justice.² Much is already being done by the various legal aid societies, but as legal aid for the poor passes increasingly under judicial control and thus becomes an acknowledged responsibility of the State, the demand for lawyers is likely to increase. Only when all these and other opportunities which correspond to real needs have been explored and tested as to their practicability under present-day economic circumstances will it be possible to determine whether there is an over-supply of well-qualified, legally trained people in the United States.

Several surveys have been made regarding the supply and demand of teachers.³ It is a subject which bristles with difficulties

¹ Loc. cit., p. 31.

² See Reginald Heber Smith, *Justice and the Poor*, The Carnegie Foundation for the Advancement of Teaching, Bulletin no. 13, 3rd edition, New York, 1924.

³ See Buckingham, B. R., *Supply and Demand in Teacher Training*, Ohio State University Studies, vol. ii, no. 15, Columbus, Ohio, 1926; Evenden, E. S., 'Teacher Supply and Demand in the United States, 1930-1,' Excerpts in *School Life*, Jan., Feb., March 1931; Hubbard, F. W., 'Teacher Demand and Supply', *Research Bulletin of the National Education Association*, vol. ix, no. 5,

class and the absence of a large urban middle class may explain this phenomenon. It is therefore not surprising to read in the report of our chief Yugoslav collaborator, Dr. Stanko Skerlj, of the University of Belgrade, that the unemployment of graduates so far as it exists is entirely due to maldistribution and to the economic depression, which is very severe in Yugoslavia. Citing the Yugoslavian standard work on professions by Professor Lovro Šušnik,¹ and the inquiries undertaken by the two Belgrade papers *Jutro* and *Politika*, he points out that even if the existing ordinances regarding the size of high-school classes and the teaching load to be carried by every secondary-school teacher were observed, a great many secondary-school teachers at present unemployed would have to be appointed. The actual state of public finance unfortunately makes such a course impossible, and secondary schools continue to suffer from overcrowded classes and overburdened teachers while many candidates for the teaching profession go idle. There are too many young physicians in the big cities, above all in Belgrade, while the provinces are inadequately provided with medical services. In 1934 the proportion of physicians to total population was only 1 to 3,100. In spite of the depression there was still an actual shortage in 1933 of veterinary surgeons, as well as of engineers in agriculture and forestry.

OTHER COUNTRIES

For several countries which have been included in our statistics of student enrolments it has been quite impossible to secure adequate information regarding the situation in the professions. Either relevant data are not available or they are so much out of date that they become useless for our purposes. Thus the Director of the Vocational Retraining Institute for Professional Workers of Poland estimated that in March 1935 roughly 170,000 out of a total of 570,000 professional workers in that country were without employment. The definition of the 'professional worker' is very wide in Poland, including as it does all classes of salaried employees.² In the light of this definition the figure of 170,000 certainly includes some graduates of institutions of higher learning. It excludes, however, those who are unable to make a living as

¹ Lovro Šušnik, *Akademski poklič*, Jugoslovanska enjigarna, Ljubljana, 1932

² 'Remedies for Unemployment among Professional Workers', in *International Labour Review*, loc. cit., p. 306.

independent practitioners. For these reasons the figure is quite useless for our purposes. Yet we have seen it quoted in one or two publications supposed to be dealing with the unemployment of graduates in the learned professions, which shows how misleading the loose use of the term 'professional worker' may be.

Actuary H. Palmström of *Norway*, whose report has been referred to before, gives a careful analysis of the actual unemployment of graduates in 1931 and 1932. He mentions that of 290 graduates of the theological faculty who took their degrees between 1928 and 1931, 125 were without any work in 1932. He also points out that the supply of graduates of medicine greatly exceeds the demand. However, these indications may be altogether out of date by now, and no further information could be obtained. Where in previous paragraphs we have quoted data pertaining to the period before 1933, we have felt justified in doing so because later information confirmed the continuance of the trends revealed in the earlier figures.

Complaints about the impossibility of finding work for large numbers of graduates in *Romania* are loud and abundant. No data are available, however, to allow of a sound analysis. On the other hand, all reports from *Turkey* seem to indicate that the country of Ataturk has been spared the evils of unemployment in the educated classes. On the contrary the institutions of higher learning find it difficult to meet the greatly increased demand for academically trained people, a demand which is altogether due to the great work of reform and westernization carried through by the Turkish dictator.

In all probability our readers will share in our sigh of relief that the fund of available information is exhausted. In the absence of co-ordinating principles, and in view of the great variety of elements and situations to be considered, we had to follow a long and tortuous road. In the next chapter an attempt will be made to discover whether any general conclusions can be drawn from our exposition of widely divergent and often apparently unrelated facts.

OVERCROWDED PROFESSIONS: CAUSE AND EFFECT

SUPPLY and demand are economic terms freely used in the market of intellectual labour. It is significant, however, that attempts to explain the mechanism operating in the market for intellectual labour simply in terms of economic theory are few and far between. Economists have realized that to operate with purely economic categories in a field of human behaviour which is substantially influenced by non-economic motives and considerations is an undertaking which may easily lead to erroneous conclusions. Both the supply of intellectual work and the demand for professional services are profoundly influenced by questions of social prestige and political convenience, by a desire for quality rather than quantity, by the extent of literacy and the general cultural level, by the degree of technological development attained, and by many similar elements. These elements can only be partially defined in economic, let alone quantitative, terms which would allow for a clear determination of the existing demand for or the supply of intellectual work at any given time.

Fascinating as it might be, it clearly cannot be the task of this report to evolve a theory, economic or otherwise, which would cover all the heterogeneous elements governing the market for intellectual labour. It is essential, however, to gain a fuller understanding of some of the peculiarities of supply and demand in the market for intellectual labour. An understanding of them will prove helpful in evaluating the data brought together in the previous chapter.

THE DEMAND FOR INTELLECTUAL WORKERS

The demand for intellectual labour is elastic, i.e. it diminishes rapidly as soon as there is a decrease in the purchasing-power of those who avail themselves of professional services, and in many cases out of all proportion with that decrease. While bakers and butchers, dealing in the bare necessities of life, will in times of depression continue to sell their goods, though perhaps on a somewhat diminished scale and—in a period of plenty—for a somewhat lower price, intellectual workers such as architects, engineers, physicians, and teachers will be confronted with a rapidly diminish-

ing demand for their services, resulting in unemployment, underemployment, and greatly diminished incomes. Their services are counted amongst the luxuries of life, to be dispensed with as long as the more primitive needs are not satisfied.

Obviously the degree of elasticity or the extent to which the demand for professional services shrinks, following a decrease in the purchasing-power, is not the same for all types of intellectual work or in all countries. Some professions are more directly subject to economic fluctuations than others. Architects, for instance, and sculptors may in times of depression see themselves completely unable to earn a living, as building-operations practically cease. Within somewhat narrower limits dentists and physicians will register a falling off in the number of calls they receive or have to pay. Operations, where possible, are postponed, and the physician is often consulted only when such consultation appears imperative. This is, of course, particularly true in those countries which are not endowed with systems of medical insurance which serve to absorb and mitigate the shocks of an economic depression. Similarly, even teachers may find themselves unemployed in large numbers where, as in the United States, the maintenance of schools is left to very small units, for instance financially weak agricultural communities, instead of being safely anchored in a state or national system of education.

This last example demonstrates not only that there are differences in the degree of elasticity of demand for professional services due to the particular type of services offered, but that the conditions under which the services are ordinarily rendered have to be considered. Independent practitioners are more vulnerable than insurance doctors. Engineers employed by private firms are more likely to suffer from a depression than civil servants. In most European countries civil service appointments are permanent, the laws of demand and supply have been superseded by legal contracts. This, however, does not mean that civil servants, or rather those who prepare themselves to become civil servants, are necessarily exempt from the repercussions of an economic crisis. Those who have obtained permanent positions before the depression sets in may be relatively secure—though emergency decrees may reduce even their numbers or their income. The main burden of the decreasing demand reflected in all kinds of economy measures has to be borne by those who find on completion of their

studies that the careers for which they have prepared are closed altogether. No new candidates are received and they may remain completely unemployed for a number of years. An exception exists only where owing to prevailing needs the Government, national or local, finds itself obliged to extend its activities to new fields (relief, greater control over private enterprise, &c.). In that case an economic depression may even lead to an increased demand for professional workers ready to enter civil service careers.

Finally, it is evident that the degree of elasticity of the demand for professional services varies according to the differences in cultural achievement and outlook which prevail from country to country or even within various sections of the same country. The population of a highly developed country will tend to consider certain types of professional service as essential as food or clothing. When during the dark days following the War the people of Austria were literally starving, foreigners visiting Vienna were surprised to find that the Opera was crowded out practically every night. The music-loving population of Austria's capital were ready to forego several meals every week in order to hear their beloved singers and actors. Similarly, it is inconceivable that a highly developed and well-balanced community like the British should consent to the closing of large numbers of their schools or a considerable shortening of the school terms. The fact that this is exactly what did happen in the United States is no proof to the contrary. Economy measures affecting the schools were taken in most of the highly developed States of the Union, but they did not substantially diminish the educational opportunities offered to the rising generation. The disastrous process of closing schools or opening them only for a few months in the year remained on the whole confined to those States where the educational level had been low before and where as a result schools were not considered an absolute necessity.

The same elasticity of demand which affects the professions adversely in times of depression operates in their favour in times of improving economic conditions. The professions which suffered most from the depression are on the whole the first to recover. A period of stagnation during which engineers and architects have had to go idle is followed by a period of intense demand for their services. Long-delayed building operations are undertaken or resumed, industries, while perhaps not ready to re-employ dis-

missed engineers who have become 'out of date' during these periods of idleness, offer ample opportunity for work to young engineers trained in the latest achievements of engineering science. Physicians and dentists see their work and incomes increase. Teachers and civil servants will follow at a distance, as economy measures entailing all kinds of restrictions are rescinded. While during the depression not even the professional workers who died or retired were fully replaced, an additional demand now becomes evident. New classes are added to schools, additional physicians and consulting engineers establish themselves, more persons with college or university training are absorbed in business and banking.

The increase in demand will be particularly marked in comparatively primitive countries where the economic recovery coincides with an improvement in cultural standards, i.e. where the need for more and better professional services is felt at a time when the necessary means are available to pay for them. Countries like India or some of the Balkan States can therefore *in the long run* expect a very substantial increase in the demand for the services of professional men and women.

One reservation, however, has to be made. The increasing desire for more and better professional services during the period following a depression, or at a time of improving cultural standards, may be thwarted and remain unsatisfied where monopolist efforts on the part of professional organizations maintain an artificially high price-level. In that case large numbers of people are forced against their will to go without professional services which they cannot afford, while new professional candidates will continue to see access to their profession barred by those already within it who are above all concerned with attaining the highest possible income for themselves.

The question of 'technological unemployment' in the professions need not detain us. We speak of 'technological unemployment' where the introduction of labour-saving devices or new inventions revolutionizing whole fields of economic activities result in a sudden decrease of demand for certain categories of workers. The disastrous consequences of the ensuing dislocation of the labour market are well known, as well as the measures designed to overcome them, such as a general reduction of working hours or the transfer of labour to new occupations. The issues involved are controversial, but there is no need to enter on a more detailed discussion, for the simple reason that technical progress, far from

diminishing the demand for professional services, leads generally speaking to a vastly increased demand for them. In the words of the experts of the International Labour Office:

'The fuller utilization of professional services, which normally tends to spread more and more from urban centres to rural areas and at the same time to increase steadily in the urban centres themselves, is a mark of the ordinary progress of technical civilization. In such a civilization there is a possibility that machinery may reduce the demand for manual labour, but professional work is generally untouched by the competition of machines, and indeed the increasing importance of technical work usually provides new openings for professional workers.'

More will have to be said later about the 'additional' demand thus created.

There are obviously exceptions to this rule. While the demand for professional services *in general* is on the increase, certain groups of professional workers may at times experience diminishing demand for their services owing to new technical inventions. They are, of course, those groups whose work requires manual skill rather than independent intellectual effort and initiative. Thus book-keepers and accountants may see themselves faced with unemployment owing to the invention of automatic devices—an unemployment usually quickly overcome by the increasing demand for office workers in general. The situation of musicians, who have lost their work owing to the invention of the gramophone, the radio, and the sound-film, is more serious. However, all these categories of workers are generally speaking without higher education. Technological unemployment within the learned professions in the widest sense is very rare. Veterinary surgeons have suffered from the replacement of animal traction by steam and motor. Pharmacists have lost some of their opportunities through the sale of patent medicines and the development of chain-stores. These changes have, however, come gradually, allowing for adaptation of supply to demand.

THE SUPPLY OF COLLEGE AND UNIVERSITY GRADUATES

The supply of intellectual workers with academic training is inelastic, i.e. it adapts itself but slowly to changes in the demand. The reasons for this lack of elasticity are both social and technical.

1. 'Remedies for Unemployment amongst Professional Workers', loc. cit.

We have dealt in considerable detail with the causes which lead to increased student enrolments. It has been shown that total student enrolments respond only to a small extent to economic fluctuations and that they may even show a strong tendency to increase in times of depression, as many of those who under normal circumstances would have turned to gainful occupations on leaving the secondary schools remain unemployed and enter the institutions of higher learning. The fact that academically trained people in civil service positions seem to enjoy a considerable measure of security, in spite of bad times when industries, business, and banking have to dismiss large numbers of their employees, acts as a stimulus to people who seek security above all and hope to attain it by acquiring a degree. Quite apart from this phenomenon it has been pointed out that to study in an institution of higher learning has become a sign of social emancipation aspired to by ever-growing sections of the population. That process of emancipation does not necessarily stop in days of depression—though, as will be shown, the educational emancipation of women may suffer a temporary set-back owing to political measures enforced by totalitarian governments which owe their existence primarily to bad economic circumstances. In democratic countries, however, everything goes to show that depression periods do not result in a substantial decrease of student enrolments. The process of social emancipation continues in spite of depressions.

While total student enrolments show only minor fluctuations which do not substantially interfere with the general upward trend in student numbers, substantial changes may take place in the numerical strength of the various faculties and departments. The preference given to one or other department is to a certain extent conditioned by the prospects in the profession for which the department prepares. Mention has been made, to quote only one example, of the sudden increase in the number of students of medicine and dentistry in Germany, following a shortage of medical graduates previous to 1925. It will be remembered that as a result the number of medical students increased nearly threefold between 1925 and 1930, while the number of students of dentistry increased more than fivefold. This might be taken as an indication that the supply of intellectual workers is after all very elastic and that the increase in supply might even greatly exceed the demand which stimulated

it. It must not be forgotten, however, that the new supply becomes effective and therefore relevant from an economic point of view only when the students leave the institutions of higher learning in search of a job. They appear on the labour market four to eight years after they first entered the universities. It is this long-maturing process, this time-lag between beginning a professional training and the attempt to start a career, which is above all responsible for the lack of elasticity in the supply of intellectual labour. It is most obvious, of course, in those careers which require a particularly long period of specialized training. The students of medicine or dentistry who entered the German universities during the years following 1925 appeared on the market for intellectual labour only during the early thirties, i.e. at a time when owing to the depression the demand for their services had dwindled to a minimum. As a result the degree of unemployment and underemployment amongst them was very acute, and would still be so were it not for the displacement of large numbers of Jewish physicians. From an economic point of view this obviously does not offer a solution, as the burden of unemployment has simply been shifted from one group to another.

The time-lag between matriculation in a professional course and entrance on a career contributes in another direction also to the lack of elasticity in the supply of intellectual work. The longer and the more specialized the preparatory process is, the more difficult it becomes to change over from one profession to another. Such a change does not only imply the loss of capital invested during the period of professional training, which may be considerable. It is very often practically impossible to effect a change, as the exclusive occupation with highly specialized matters which characterizes professional courses has rendered the graduates of these courses incapable of any work outside their chosen profession. In other words, once they have appeared in the labour market, it is practically impossible to reduce their numbers, even though the demand for their services may at times become negligible.

'OVERCROWDING' DEFINED

We are now in a better position to attempt a definition of the term 'overcrowding of the professions', always with the understanding that we are dealing only with those professions which

tend to require academic training. One thing has become obvious; acute unemployment or under-employment at any given time is not necessarily a sign of overcrowded professions. It may be due altogether on the one hand to a sudden decrease in the demand for professional services caused by a decrease in economic prosperity and diminishing purchasing-power, and on the other hand to the impossibility of reducing the supply of professional workers. If the depression lasts but a short time the economic improvement following it may, owing to the great elasticity of the demand, lead within a short time to a complete reversal of the situation, i.e. the supply of intellectual workers being inelastic, a shortage of university-trained people may make itself felt, especially where poor professional prospects in depression times have resulted in a decrease of enrolments in particular faculties.

An overcrowding of the professions can only be held to exist where the supply of professional workers and the services they are able to render exceeds for a prolonged period¹ the normal demand for such services. The 'supply' is composed of those who leave the institutions of higher learning with the intent to enter a profession, *plus* the 'reserve army' of those who were unable to make a living in their profession during the period of depression preceding 'normal' economic circumstances. The 'normal demand' is more difficult to define. Unless we are content with a return to more primitive forms of civilization, it can be assumed, however, that it will certainly not lie below the demand for replacement due to death and retirement. Provided professional statistics are up to date, this demand can be more or less accurately calculated on the basis of statistical data concerning the age of the practising members in the various professions, their average retiring age, and

¹ The exact length of this 'prolonged' period cannot be laid down in general terms. In times of prosperity it is reduced to a minimum. Even if only one generation of graduates, or a large section of them, fails to be absorbed within a year of graduation, it can be assumed that some or all of the professions have reached saturation-point. The demand for additional professional services which may exist is not strong enough to deflect an additional part of the national income for the remuneration of these services at the price at which they are available. In times of depression the period may be as long as two to four years. During this period one of two things will happen; either the depression will be followed by a period of prosperity, during which it will soon become obvious whether a particular profession is overcrowded, or the depression will continue, with the result that the graduates of these years will form a large reserve army, which even after a belated return to prosperity will for years lead to an oversupply of intellectuals in search of work.

current mortality rates. It has been pointed out that various experts estimate the demand roughly, and on an average, at 3 per cent. of the number of gainfully employed persons with academic training. In addition to the demand thus determined we have to consider also the possible additional demand due to the growth of population, a better appreciation of professional services, and an increase in national income. It is evident that the weight and extent of the additional demand can only be estimated in approximate terms, and then only for each country separately. The demand for professional services and particularly the additional demand for them is a function of the degree and type of culture and civilization characterizing a given community. It will be small in primitive countries which remain primitive¹ and large in highly developed countries which are characterized by a continuous expansion of higher service occupations. As it varies from country to country we cannot attempt to lay down any general rules. This much, however, may safely be said: the additional demand for university-trained people in general may easily be as large as the demand due to replacement. The development in all western countries and in most professions serves to corroborate this statement. In many countries the number of engineers, dentists, teachers, and other professional workers—counting only those who were actually exercising their profession before the depression—has more than doubled since the beginning of the century. If we assume the increase to have been only 90 per cent. during the last thirty years, it means that the additional demand amounted to 3 per cent. per annum on an average. In other words the total demand for intellectual workers with academic training, in percentages of the average number of gainfully employed intellectual workers during the last thirty years, amounted to 3 per cent. annually due to replacement and to another 3 per cent. due to expansion.

Needless to say, the size of the additional demand varies also from profession to profession. It tends to be smaller in the old-established professions, such as medicine and law, whose services have in the highly developed countries been more nearly adapted to existing needs. As has been shown in the case of the

¹ In primitive countries entering for one reason or another on a period of economic expansion and cultural progress the additional demand will on the contrary, as indicated before, be very large.

United States, there may remain a margin of unsatisfied needs, for instance in the medical field, which represents a potential demand and which might lead to an effective additional demand if the cost of additional medical services could be met. This margin, however, is small and can only with difficulty be translated into an effective demand. On the other hand the additional demand may be very much larger in such professions as engineering or teaching. The number of college teachers in the United States in 1930 was according to census figures four times as large as in 1910. The number of technical engineers increased threefold during the same period. Furthermore, altogether new careers may open up for college-trained persons, such as executive and other positions in banking or business, which used to be occupied by persons who did not have the advantage of a higher education.

In this connexion another peculiarity of the market for intellectual labour needs emphasizing. It is a well-known fact that the demand for any product may be increased by advertising and by the perfection of the goods offered. So successful have these efforts been in the United States that motor-cars or radio sets, which in many highly developed European countries are still considered a luxury, are now counted amongst the minimum requirements of decent living. Much of the additional demand for professional services is also due to 'advertising' in the best sense of the word. It takes the form of an education for a better appreciation of medical services, improved housing-conditions, and other manifestations of cultural progress which lead to the employment of intellectual workers. What is overlooked sometimes, however, is that the supply of intellectual work may create its own demand, provided the professional services offered are of exceptional quality. Business firms which some twenty or thirty years ago never thought of employing college graduates absorb an increasing number of them every year, simply because they have discovered that the particular qualifications and qualities of college graduates make them desirable employees. Similarly, college degrees are increasingly demanded not only for secondary-school teachers but for those who plan to teach in primary schools.

While it is obviously impossible to predict in general terms the extent to which high-quality work on the part of graduates of institutions of higher learning may lead to an increased demand, it is safe to assume that many additional occupational fields may

be conquered by college-trained persons. Again, the possibilities of expansion due to newly created demands are more strictly limited in the well-established professions requiring highly specialized training. Any conquest of a new occupational field usually requires a certain adaptation on the part of those entering the field which, as we have seen, cannot easily be expected of those who have spent years of work in specializing themselves for a profession like medicine. The graduates of law schools are better off, and may with but little adaptation enter a civil service career instead of the more orthodox career of the lawyer. The adaptability is of course greatest amongst college graduates who, as in the United States, are only slightly specialized in any particular field and can be expected to acquire in a comparatively short time the skills required in the special fields they set out to conquer, whether it be business, social service, or other higher service occupations.

Taking all these elements into consideration and elaborating further our definition of the term 'overcrowded professions', it may be said that the professions requiring academic training of their members can only be considered overcrowded where the annual supply of new candidates exceeds for a period of years the normal demand, it being understood that the 'normal' demand consists both of the demand due to replacement, which can be calculated, and the additional demand due to expansion, which can only be estimated for each country and each profession separately. The additional demand will be comparatively large in highly developed countries and in primitive countries entering on a period of social progress and economic prosperity. It will also be large in 'new' professions and may be considerable in those careers which do not require a highly specialized training. The additional demand may, however, not become effective where monopolist efforts on the part of certain professions maintain an artificially high price-level for the services rendered by these professions.

THEORY AND FACT

Looking back on the medley of facts given in the last chapter and applying to it as co-ordinating principles the findings of our theoretical discussions, a few generalizations and a certain grouping of the facts become feasible.

It needs no further emphasis that most of the professions in all under consideration have in recent years suffered from

unemployment, under-employment, and greatly decreased incomes. It is also safe to say that, with the exception of some countries of which more will have to be said below, many of these signs of an 'overcrowding' of the professions were originally due to the economic depression, which in view of the elasticity of the demand for intellectual labour affected the professions in a particularly severe form. In other words, the critical situation, particularly of recent graduates unable to secure work, was not really due to an 'overcrowding' of the professions but to a disastrous and altogether abnormal 'under-consumption'.

In the meanwhile the depression has lasted for an unexpectedly long period and continues unabated in some countries, with the result that large reserve armies of intellectual workers in search of a gainful occupation have come into existence and are continuing to grow. New supplies of intellectual workers composed of graduates who began their studies some four to eight years ago appear on the market every year, irrespective of the diminished demand. This factor has radically changed the situation which existed at the beginning of the depression. The accumulated supply is likely to exceed for some years even the greatly increased demand which sets in with a return to some measure of prosperity, and which has already become effective in such countries as the United States or Germany. The world is now faced with an actual overcrowding of the professions, or rather an over-supply of professionally trained persons, which is likely to last all the longer as student enrolments have decreased on the whole very slightly during the depression period. The degree of overcrowding varies, however, greatly from country to country and from profession to profession.

In the first group of countries, to which belong Austria and Hungary, the overcrowding is complete and absolute, i.e. it extends to practically all the professions and is due to a continuous over-supply of intellectual workers, which did not set in with the last depression but which goes back to the first years after the War. Two national communities which had provided the intellectual leadership for a large empire were unable to adapt themselves to the loss of this empire, and continued to educate in their institutions of higher learning practically the same number of candidates for the professions as they had produced before. As the graduates had to offer their services within a fraction of the original territory

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and to a very much smaller community, an overcrowding of the intellectual careers became inevitable.

Another grouping of countries is so obvious that it has already been mentioned in the last chapter. We refer to the succession-states, such as Czechoslovakia, Finland, Latvia, Poland, and Rumania, which are suffering from an over-supply of academically trained persons in search of a professional career. In their case the depression only aggravated the existing difficulties, but did not cause them. The worst of the present difficulties is that the available positions are occupied by, comparatively speaking, young people, with the result that the demand due to replacement is exceptionally low, while student enrolments continue to correspond to the abnormally high demand of the first few years after the War. Most of these countries being young, characterized by a rapid economic and cultural development, this deficit in the demand due to replacement might up to a point have been balanced by a large additional demand due to expansion. The depression interfered, however, with this development and even at present the additional demand remains small. The size of the reserve army of unemployed intellectual workers which grew up cannot be accurately determined in the light of available information, but is doubtless very large. Thus, even if a large additional demand should make itself felt in the years to come, it will take a considerable time to absorb the over-supply of graduates. In view of the high ratio of students to population in several of the countries mentioned, particularly in Esthonia, Finland, Latvia, and Rumania, it may even be assumed that the annual supply of new graduates in itself, quite apart from the existing reserve army, is too large to be absorbed, as such absorption would necessitate both a substantial demand for replacement purposes as well as very considerable additional demand.

A third group is constituted by such countries as Bulgaria and Yugoslavia. With certain reservations British India may also be included. All these countries suffer acutely from a lack of professional services and yet they complain of great unemployment amongst their educated classes. They need more physicians, a larger number of well-qualified teachers, their agriculture could make good use of college-trained agricultural experts, they want to develop their industries, which are only in their infancy—in one word the potential demand for trained men and women is impres-

sive. It does not, however, become effective because of the bad economic situation, for, to use the words of Sir Michael Sadler, 'the market for the product of any specialized education is limited by the economic conditions of the time'.¹ Thinking of India one might add that it is also limited by social conditions, for while poverty is appalling amongst large sections of Indian people, the wealth of other sections might allow for a more rapid development were it not for the high degree of illiteracy prevailing in the country. In so far as these conditions are chronic no substantial improvement can be expected in the near future.

Holland, Sweden, Switzerland, France, and Germany might be brought together in a fourth group. They are all highly developed countries which during the last few decades have registered a large increase in student enrolments. Both the Limburg and the Wicksell reports come to the conclusion that the annual supply of graduates is too large, and similar conclusions have been put forward in Switzerland, France, and Germany. There can be no doubt that the annual output of the institutions of higher learning greatly exceeds the replacement demand. It is furthermore assumed that the additional demand due to expansion will be small in the years to come, as these countries are well provided with professional services. Whether this prediction will come true is another question. In the light of the large additional demand which has manifested itself steadily from before the beginning of the century until the depression set in, it may well be that the estimates arrived at err on the conservative side. The rapidity, for instance, with which the market for technical engineers has expanded in Germany during the last two years may serve as a good omen. Nevertheless, it is likely that the reserve army of teachers or dentists, or—in the case of Germany—of lawyers also, will continue to be a disturbing element on the market, and that a balancing of demand and supply will probably not be achieved as long as the number of new graduates continues to be as high as in recent years.²

The future of coming generations of graduates in these countries might be envisaged with greater optimism were it not for the

¹ Sir Michael Sadler, *Liberal Education for Everybody*, London, 1932, p. 11.

² The *numerus clausus* legislation in Germany may lead to a complete reversal of the situation and to an acute shortage of some categories of professional workers (see pp. 202 ff.).

peculiar lack of elasticity of the supply in most of the professions. The various professional courses are not only highly specialized but they are very long, extending in Holland and Sweden over a period of as much as eight years. This in itself makes it very difficult for the graduates of such courses, who cannot find places within the narrow precincts of their chosen career, to accept work even slightly different from the one they anticipated. They are still less able to reach a degree of adaptation which would allow them to go out and conquer new occupational fields in business or elsewhere. Furthermore they are up against a good deal of social prejudice, which tends to consider any one a failure who, having graduated from a university, does not find a position in one of the traditional, well-established professions. All this results in a lack of mobility of intellectual labour which justifies the assumption that some of the professions in this group of countries may for a long period remain overcrowded, even if in new careers an additional demand for university graduates makes itself felt.

Great Britain and Italy form a fifth group which needs little comment. Student enrolments in these countries have remained comparatively low. The dislocation of the market for intellectual labour due to the depression has proved to be temporary and applies at present to very few professions. In Great Britain the raising of the school-leaving age will in all probability end the remaining unemployment amongst teachers, while many Italian graduates, particularly those seeking administrative careers which have shown signs of being temporarily overcrowded, may find opportunities in the new Italian Empire.

This leaves only Belgium, Japan, and the United States, of all those countries which have been given special consideration in the last chapter. Belgium might have been included in the same group as Holland, Sweden, &c., except that the ratio of students to the population is very much lower than in the other countries belonging to our fourth group. It has been shown that the difficulties which nevertheless exist in some of the professions are due to maldistribution rather than to a real over-supply. Thus the situation in Belgium need not cause any great anxiety. The unemployment of graduates in Japan is also likely to be temporary, provided a better distribution of students over the various faculties can be accomplished, by which the pressure on the medical faculty

for those preparing for a teaching career can be relieved. With

919 inhabitants per student, Japan is still far from having attained the degree of density prevailing in most of the European countries. At the same time it is obvious that the stupendous development of higher education in Japan, which started after the War, cannot continue indefinitely unless the country is to run the risk of creating within a few years a large over-supply of graduates. As regards the United States we have nothing to add to our exposition of facts in the last chapter. Owing to the great mobility of intellectual labour in the United States the outlook is better than might be anticipated in the light of the large student enrolments in American colleges and universities. Also, some additional demand even for such highly specialized services as are rendered by the medical profession is likely to become effective, provided it is not held in check by monopolizing efforts to maintain too high a price-level for services offered.

IN THE VANGUARD OF REVOLUTION

Our narrative would not be complete without recording some of the wider repercussions of the crisis in the professions and the unemployment or under-employment of young college and university graduates. These repercussions may be far-reaching even where the crisis is only temporary. Where the overcrowding of the professions leads to a prolonged unemployment of successive generations of graduates, it may become a formidable threat to the very existence of an ordered society. This is not surprising for any one endowed with a little imagination. We dedicated this book to the 'thousands of parents who saved and slaved a lifetime to give their children an education, only to see them in the end unemployed, very often broken in body and in spirit'. And to the 'promising young men and women, loaded with degrees and certificates, to whom society denies the opportunity to put to any use their gifts and their knowledge'. We also spoke of their 'impotent wrath' and their 'slow demoralization', the demoralization of those whom politicians love to call 'our hope for the future'. These are not empty phrases, they depict a harsh reality whose political import is only too obvious.

We are not expounding a theory. During the preparatory stages of our inquiry we travelled widely throughout most of the European countries. We sat up many a night with students whose life was overshadowed by the fear of what would happen once they had

obtained their degrees. Graduates of two or three or four years ago would talk to us, dejectedly, blank hopelessness in their eyes. They had paid call after call, written letter after letter, all to no avail: society did not want them, there was no work for them. And then the revolt set in, a new determination was reached: if society did not want them, then society had to be changed. The old order was rotten, it must be destroyed; a new order must be created, an order in which there would be room for them, work, position, happiness. They joined the vanguard of revolution.

In Germany the 40,000 or 50,000 workless university graduates in 1931-3 became, together with unemployed subalterns of the old imperial army, the spear-head of the national-socialist movement. In Hitler, himself a product of life as a down-and-out in the slums of Vienna, they found a man after their own heart. He personified the hatred against the existing rulers, he promised them a new social order and a new Germany free from the fetters of the peace treaties. He depicted Germany as a country of 'have-nots' and called upon German youth to join him in his crusade against the 'haves'. Using socialist terminology he described Germany as a 'proletarian' amongst the nations in the same way as Mussolini spoke of Italy at the beginning of the Abyssinian campaign. This nationalist emphasis is important, for it explains why the younger generation of graduates followed Hitler rather than the communist leaders. Like Hitler himself, most of the graduates of the German universities came from the middle and lower middle classes, which in all countries, for reasons into which we cannot enter at this point, furnish the largest contingent for nationalist movements. Hitler finally promised to remove the Jews from those positions in government, in the professions, in business, which according to him rightfully belonged to the thousands of German university graduates who could not find work. It is small wonder that the reserve army of unemployed intellectuals became Hitler's shock brigade and that they were amongst the first to help him to power. It could not have been otherwise.

Needless to say we are only dealing here with one aspect of the German revolution, and it is not intended to imply that this revolution is primarily due to the unemployment amongst university graduates. Belatedly the realization has dawned on the world that the so-called peace treaty of Versailles and its subsequent

interpretation has been Hitler's most powerful ally. The fact remains, however, that he drew some of his most ardent and effective collaborators throughout Germany from amongst the ranks of the 'white-collar proletarians'. And it is equally true that those in power before 1933 failed in their trust by not acting more energetically in providing for the unemployed graduates and by not paying sufficient heed to the warnings of those who foresaw what was coming. Such warnings were not lacking. Schairer gives in his book,¹ which appeared in 1932, some three pages of most telling quotations from the utterances and writings of people in all walks of life. He himself concludes that 'the less these graduates are able to find a natural expression in their chosen professions, the more will their energies concentrate on the realization of political aims, which promises by way of radical changes to assure them of a right to live and to work'.²

In Germany the revolution has destroyed the old régime. It cannot be our task to appreciate its results and to determine whether a new order, particularly in the social field, has actually been established. What, however, of all the other countries which suffer from an acute crisis in the professions? The answer is plain: much of the unrest in these countries, Austria, Romania, or even France, is fostered by dissatisfied and harassed students and young graduates out of work who are preparing for an overthrow of existing régimes. Just as in Germany, most of the movements in which they take a prominent part are nationalist in character and have much to say about 'social justice'. Probably the majority of the students in Austria are national-socialist. They are inspired by the idea of a greater Germany, and while their motives are in many ways idealistic the idea is ever present with them that there will be more work for them in such a greater Germany. The proportion of students in the Romanian 'Iron Guard' is large and their motives are not necessarily idealistic, as is shown by their attitude to the 'problem of the corpses' (see pp. 92-3). In Hungary the institutions of higher learning and the organizations of young graduates are hotbeds of revisionist propaganda. And such movements as the 'Croix de Feu' and the 'Action Française', with their large membership of students and young intellectuals, are not strangers to the at times violent propaganda against foreign students and foreign professional people in France. Even in a country like

¹ Loc. cit., pp. 81-4.

² Loc. cit., p. 77.

Holland, where a national-socialist movement has been gaining ground in recent years, these 'Nazi' tendencies are particularly strong amongst students and recent graduates in search of work. These examples could easily be multiplied. The young generation is getting impatient. Theoretical deliberations such as we indulged in in the earlier parts of this chapter will not satisfy them, even if they are told that the situation is 'after all not so bad' and that the prospects for the future are better. They want action to see their present lot improved and to avoid a further overcrowding of the professions due to a planless expansion of higher education.¹ Before passing on to a discussion of the measures actually taken or contemplated to achieve these ends, a yet wider issue has to be touched upon which leads us beyond present-day preoccupations.

Not only political systems but the very basis of western civilization seem to be threatened to-day. Centuries of heroic struggle for the primacy of order over disorder, of mind over matter, led to the establishment of that civilization in which man hoped to be secure, leading a life inspired by moral and religious concepts and governed by reason. Moral precepts, religious concepts, reason—they are all questioned or openly distrusted to-day. The tools given to mankind in its struggle for a more civilized world by the great heroes of the mind from Plato to Thomas Aquinas, from Erasmus to the Encyclopedists, from Kant to Bergson, are either thrown away or used against their authors. Brute force is rampant again, murder recognizes no ties of blood or friendship, and murderers claim hero-worship. Religion is made subservient to the dark designs of men or groups drunk with power, the irrational impulses triumph over reason and clarity of vision. No doubt the catastrophe of the World War is largely responsible for this return to barbarism. Nor can it be denied that even before the War the world was far from having reached the degree of perfection claimed by self-satisfied 'liberals' and 'rationalists' who would not recognize man's craving for the supernatural, for metaphysical

¹ As early as 1922 Professor Ernest Barker foresaw such a development, as shown in the following passage: "There is a certain danger, in modern times, of what may be called the clericalization of society. The general spread of education, if it works by the book and directs itself only to the intelligence, readily produces a great supply of would-be clerical workers, which pours in a flood towards every grade of clerical service. The channels are not adequate for its flow; the discontented product of a clerkly system of education may become a revolutionary force." (Cf. Ernest Barker, *National Character and the Factors in its Formation*, New York and London, 1922, p. 244).

certainty. But the search might have gone on, reason and faith might have deepened man's understanding of himself, the world, and the beyond, had it not been for other disintegrating elements which made their appearance after the War. And this is the important point—the misery and tragedy of the generations of frustrated university graduates was one such element.

What happened? The over-supply of graduates and the over-crowding of the professions caused a diminishing of the prestige of intellectual work. Not only did professional services drop in price but intellect itself slowly lost in value, was at a discount. Karl Mannheim in a remarkable analysis of the revolution in which we find ourselves emphasizes this point:

'The real importance of this overcrowding does not lie only in a depreciation of the intellectual careers, but in the depreciation in the public mind of the intellect [*Geist*] itself. The layman thinks that the intellect is held in honour because of its inherent merits. Yet it is a sociological law that the social value of the intellect is determined by the social position of those who are its protagonists.'¹

At the same time the 'intellectuals' themselves, those graduates whom all their intellectual efforts did not save from starving, lost faith in their future, abandoned all the rational planning which characterizes the educated person. To cite Mannheim again:

'The destructive effects on culture and the irrationalizing consequences of permanent unemployment for society cannot be underestimated, for the changes in attitude of the educated classes naturally extend their influence beyond these circles. The most essentially negative effect of this unemployment consists in the destruction of what one might call "planning for life". Such planning is a very important element of the rationalization of man, as more than anything else it keeps the individual from yielding to momentary impulses (*Momentreaktionen*). Its destruction increases to an extraordinary degree the suggestibility of the individual and strengthens the belief in miraculous cure-alls.'²

Several years before Mannheim wrote these lines another German professor, collaborating with the *Deutsche Studentenwerk* in Dresden, expressed a similar thought: 'The realization of the idea of a common Europe (*europäische Idee*), however modest in its start, is fundamentally dependent on a growth of the European

¹ Karl Mannheim, *Mensch und Gesellschaft im Zeitalter des Umbaus*, Leiden, 1935, p. 77.

² Loc. cit., p. 81.

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intellectual consciousness (*eine Steigerung der europäischen Geistigkeit*).¹ Of that *Geistigkeit* there is little trace to-day. And yet the future of Europe and the world depends on it. In so far as the unemployment of those who intended to devote themselves to a life of intellectual achievement but who are at present thrown off the rails has contributed to the destruction of this *Geistigkeit*, it is essential that ways and means be found to overcome it.

¹ Georg Schiebel in his Introduction to *Der Lebensraum des geistigen Arbeiters*, by Dr. Ludwig Niessen, Munster, 1931.

PART III

COUNTER-MEASURES

THE overcrowding of the institutions of higher learning, alleged or real, and the moral and economic misery of hundreds of thousands of young graduates to whom every form of remunerative work has been denied, has deeply impressed public opinion and has led to a myriad proposals and measures intended to bring a change for the better. These measures are rarely co-ordinated and their effects are in most cases transitory. Few of them go to the root of the trouble.

All these *ad hoc* efforts can be classified according to whether they are primarily intended to affect student enrolments or the market for professional labour. It is under these headings that we shall deal with them. Their very inadequacy will oblige us, however, to add another part on 'occupational and educational planning' which will deal with some of the more fundamental issues which up to recently do not seem to have found the attention they deserve.

VI

CONTROLLING STUDENT ENROLMENTS

THE fact that the proposals for controlling the number of students are nearly the same from country to country is not necessarily an indication of a lack of imagination and resourcefulness, but of the restricted possibilities the universities themselves have to combat overcrowding. Stricter examinations at the beginning, during, and at the conclusion of the period of study at the university or college, the raising of examination fees, and the application of a *numerus clausus* generally exhaust the wisdom of reformers. It is not difficult to prove that most of these measures can be applied only with great circumspection and that they lead but rarely to the wished-for results.

STRICTER EXAMINATIONS

The layman tends to see in examinations a panacea for the overcrowding of the universities and the professions, particularly if he himself has in the dim past sat for examinations and if there is not the slightest danger that he will ever be asked again to submit his

knowledge and ability to the scrutiny of the examiner. It is, therefore, not surprising that the voices are loud and numerous which in all countries clamour for the stiffening up of the examinations which confer the right to enter an institution of higher learning. On the surface it appears to be a justified demand, certainly very much sounder than the suggestion that the final examinations should be rendered more difficult. This latter proposal seems to us to have but small advantages and a great many drawbacks. A student unable to pass his final examinations in spite of repeated attempts ought, generally speaking, never to have been admitted to an institution of higher learning. Besides, the deterring influence of examinations that a first-year student will have to face in four or five or six years' time is negligible. But even stricter school-leaving or college-entrance examinations are not free from the dangers which are inherent in final examinations, so long as secondary schools are organized in such a way as to qualify their graduates for the college or the university and nothing else. In such a case, though failure to be admitted to higher education will obviously not mean the loss of all the benefits of the three or four years spent in secondary schools after the age of 14 or 15, it will nevertheless create a feeling of frustration which ought to be avoided if possible.

There are, however, even more cogent reasons for using the examination method with great circumspection. Thanks to the generosity of the Carnegie Corporation of New York, and under the auspices of the International Institute of Teachers College, Columbia University, a group of distinguished educators and psychologists who represent the United States, France, Great Britain, Germany, Switzerland, and some of the Scandinavian countries has during the last five years made a thorough study of the problem of examinations in all its ramifications. The results obtained so far, while not final, are most revealing. The report of the first Conference on Examinations, convened in the course of the inquiry by Professor Paul Monroe in May 1931 at Eastbourne, England, emphasizes some of the chief weaknesses of examinations as now conceived.¹ A second conference was held at Folkestone, England, from June 8 to 10, 1935. The report of that conference, edited like the first by Paul Monroe, appeared in 1936 under the

¹ *Conference on Examinations*, Bureau of Publications, Teachers' College, Columbia University, New York, 1931.

title *Conference on Examinations II*. It points out the tremendous importance of the personal and subjective element in examinations, on the part of both examiner and examinee, which makes of examinations much more a game of chance than is generally realized. This fact was fully borne out by studies made in England under the direction of Sir Philip Hartog and Dr. E. C. Rhodes, and in France under Professor Laugier of the Sorbonne. As the findings of the two groups¹ met with much publicity at the time there is no need to enlarge on them. Suffice it to recall that the French inquiry proved the wide variations in evaluation and subsequent marking of one and the same paper by different examiners. The English inquiry, in a way, obtained even more striking results by proving that one and the same examiner may vary widely in his judgement of the same paper if it is given him some time after his first marking of it.

Another difficulty inherent in examinations and tests was forcibly pointed out by Professor Delisle Burns at the Eastbourne Conference. He disparaged present-day examinations on the ground that they were old-fashioned and tending to produce candidates who were not useful members of their professions or of present-day society. A new society needed new types of man: 'When I come to consider all these different social changes and the evolution of a new type of person in every section of life, I find that our standards in regard to the type of person we want to produce and to the tests that we are applying are very old-fashioned.'² And farther on in his paper: 'A social revolution will occur in the Western World, if the educational system does not find the kind of man who is needed and the kind of tests that will distinguish this man.'³

It must, of course, not be concluded from these remarks that

¹ Cf. Sir Philip Hartog and E. C. Rhodes, *An Examination of Examinations*, London, 1935. (This publication gives a summary of a fuller report, actually in print, which is to appear shortly under the title *The Marks of Examiners*.) H. Laugier and D. Weinberg, 'Le Facteur subjectif dans les notes d'examens', in *Publications du Travail Humain*, Série A, No. 3, Paris, 1935. The main results of the English and the French inquiry were submitted to the Folkestone Conference and are therefore reproduced in *Conference on Examinations II*. The same report contains a statement by I. L. Kandel emphasizing the tendency to objective examinations in the United States and a summary of a study made by the Scottish Committee of the Examinations Inquiry, the report of which was published under the title: *The Prognostic Value of University Entrance Examinations in Scotland*, University of London Press, London, 1936.

² *Conference on Examinations*, loc. cit., p. 230.

³ *Ibid.*, p. 233.

examinations, even as they are at present, are in all cases undesirable. If rightly conceived and organized they can at least in some degree serve their fourfold task, which is, according to Paul Monroe: (1) to be a means of instruction; (2) to help in the selection of those who may enter on higher grades of study; (3) to control the admission to various employments and professions; (4) to serve as a means of social control, i.e. to maintain the social and intellectual standards of the various classes.¹

To attain these ends it is essential to minimize the sources of error and variation due to the subjective element which may interfere with the results of any one examination. It is furthermore necessary to harmonize the requirements for admission with the kind of work to be accomplished in the institutions of higher learning or the professions. Speaking of matriculation, it is difficult to see how such a general entrance examination can meet these conditions. Very often the papers are marked by external examiners who have no knowledge of the personal character and ability of the candidates, but judge them on the basis of a few examination papers which may be bad because the candidate happened to have a bad day when he answered the paper. Or good papers may receive bad marks because the examiner happens to be in a highly nervous state. Furthermore, as the examination is set for all students irrespective of the faculty they plan to enter, its syllabus is likely to be overburdened with heterogenous subjects. The desire to 'make the examination more difficult' leads easily to the adding of new subjects or to the putting of such specialized questions that only an expert in cramming may happen to possess the mechanical knowledge necessary for an answer. The saying of Montaigne is reversed into: 'Mieux vaut une tête pleine qu'une tête bien faite.'

These dangers are less marked where admission to college is made dependent on a school-leaving examination. It is inevitable that in such an examination fuller account will be taken of the general character and ability of the candidate as known to his teachers. Thus, while the element of chance will not be altogether eliminated, chance results will be minimized. It is a drawback of this procedure, however, that school-leaving examinations have to do justice both to those who are going on to college and to those who are not. Both those of 'practical abilities' and of 'academic

¹ *Conference on Examinations*, loc. cit., pp. 2-4.

leanings' have to be tested by one and the same examination.¹ As long as a final examination is required it is difficult to see how this problem can be overcome. The best solution would be to abandon altogether the single examination at the end of the secondary school, and to extend the selective process over a longer period. Thus it ought not to be beyond the powers of a highly qualified teaching staff to determine on the basis of cumulative records, arrived at by continuous observation, minor examinations, and tests set over three or four years, whether a pupil is fit for higher studies. Unfortunately this method breaks down where a multiplicity of secondary schools with widely varying standards claim to prepare for the universities, or where the training of teachers is such as to make it inadvisable to entrust them with the heavy responsibility of selection.

The well-known facts we have just recapitulated tend to invalidate the argument for stricter examinations. So long as the methods in use are as inadequate as they are at present, any tightening of the examination screw is likely to magnify all the elements of chance and ineptitude which are the curse both of examiners and examinees. Notwithstanding, a majority of countries has resorted to stricter examination in order to restrict student enrolments, and other countries are considering doing so. A few examples will illustrate this.

The *baccalauréat* in France is probably the most difficult examination set for young people of 18 or 19 in any country. Through it they have to prove not only that they have acquired a *goût de la culture générale*, that they excel in composition and formulation, but they have to demonstrate a wide acquaintance with the Greco-Latin civilization, with history, and with the principles of mathematics. These are admirable subjects, intense occupation with which has given the French students a general intellectual formation second to none. To these subjects, however, have been added the sciences, and each student sitting for the *baccalauréat* has to write a paper on physics or chemistry. This addition was originally made, not to render the *baccalauréat* more difficult, but because an acquaintance with science was considered an essential part of that

¹ It is obviously not possible to resort to two separate types of examination, as such a procedure would presuppose a preliminary selection and division into two groups which would be strongly objected to by those pupils of indefinite abilities who hope to be admitted to higher education.

culture générale which the examination was intended to test. It nevertheless greatly added to the difficulty of the examination, which M. C. Bouglé, Director of the École Normale Supérieure, has called the *baccalauréat terrible*.¹ And there can be no doubt that it has served to restrict student enrolments. In July 1934, for instance, 1,464 secondary school students (1,163 boys and 301 girls) presented themselves for the *baccalauréat* in the three French departments of Bas-Rhin, Haut-Rhin, and Moselle. Only 532 (390 boys and 142 girls) passed the examination, or a little over 36 per cent.

Romania introduced the *baccalauréat* only in 1925, definitely with the object of restricting the entrance to the institutions of higher learning. Constantin Kiritzesco regretfully states in 1935 that the results have not come up to expectations.² He emphasizes the element of chance due to the composition of the commissions before which the examination was to be taken, and which changes from year to year. In 1928 only 45.39 per cent. of those who had presented themselves for the examination in June were actually admitted and only 38.29 per cent. of the September candidates of the same year. The corresponding figures for 1932 were 76.75 and 71.35 per cent.; for 1934: 52.90 and 39.32 per cent. These figures are indeed striking and bear out everything that has been said about the personal and subjective element in examinations. In order to minimize this element candidates were allowed to present themselves for the *baccalauréat* an indefinite number of times, with the result that the original aim of the measure—to restrict student enrolments—was not reached after all, as most of the candidates simply by right of *ancienneté* after repeated trials succeeded in obtaining their certificate. Thus the Romanian Government saw itself obliged finally to introduce a *numerus clausus*, which will be discussed later. In the same category belong such countries as Greece, Latvia, and Poland, which in recent years have instituted special university entrance examinations, which serve to select those students who are admitted under existing *numerus clausus* laws affecting all the institutions of higher learning or only certain schools or faculties. Other countries such as Yugoslavia, Czechoslovakia, Spain report that, with growing enrolments in secondary schools, existing school-leaving examinations have been

¹ *Conference on Examinations*, loc. cit., p. 41.

² Constantin Kiritzesco, loc. cit., pp. 48 ff.

stiffened. To our knowledge no special laws have been passed to this end.

The *Commission pour l'étude du surpeuplement des universités et du chômage des intellectuels* in Belgium suggests that the present school-leaving examination should be made both compulsory and more difficult. Only those who have successfully passed are to be admitted to an institution of higher learning. The special entrance examinations to certain schools and faculties which were introduced some time ago are nevertheless to be continued.¹ The Commission furthermore suggests that within the secondary schools the promotion from one class to another should be rendered more difficult.²

The Limburg Report contains some interesting proposals for Holland. It does not suggest any further examinations but considers it advisable that in the case of those students who have passed their final examination for leaving secondary schools of the *Realschul*-type (schools with emphasis on the sciences rather than the classics) a distinction be made between those who are considered fit for higher studies and those who are not. The verdict is to be communicated to the pupil and his parents as well as to the competent State Department of Education, but is not to appear on the school-leaving certificate, so as not to interfere with the pupil's chances of securing employment. Furthermore, it is to serve as a warning rather than a barrier to admission to a university. If the student, however, in spite of the warning decides to embark on higher studies, he cannot expect to benefit by any bursaries, remission of fees, or similar facilities.³ No official action has so far been taken on this proposal.

The tendency in England is to separate the secondary school certificate, which until recently has been accepted under certain conditions for admission to the universities, from the matriculation examination. The Joint Northern Matriculation Board has already announced action on these lines, to become effective in 1938. The result will be to introduce greater flexibility in the organization of secondary-school courses for the large mass of pupils who do not proceed to the universities or other forms of higher education.

The belief in the efficacy of the examination system seems to be

¹ Loc. cit., pp. 10-12.

² Ibid.

³ Limburg Report, loc. cit., pp. 582 ff.

weakening in Japan. The Japanese system of education is highly selective. According to Paul Monroe only 20 to 25 per cent. of the pupils at any school are permitted to go on to a higher grade.¹ In spite of this we have recorded a particularly rapid increase in student enrolments since the end of the War, due to the large masses of pupils entering secondary schools. Our Japanese correspondent, Mitsuaki Kakehi, comes to the conclusion that 'restrictive measures such as the stiffening of examinations, if not carried out to such an extreme degree as to defeat the basic purpose of education, will never be effective'.

We shall not enlarge on the situation in the United States, as the conditions for college admission vary so widely that any generalization is impossible. Besides, while some colleges and universities, particularly those which are privately endowed, make admission dependent on certificates from a selected number of schools, on tests, examinations, interviews, and other criteria, and thus effect a certain selection, it is always possible for any prospective student to be admitted to some college or university, though possibly not to certain strictly professional courses.

Before leaving the subject of examinations giving access to institutions of higher learning a distinction has to be made between general examinations set for all prospective students, irrespective of their interests, and those which qualify for entrance to a specific faculty or department. In so far as the latter serve to discover the extent of a student's knowledge and his ability to follow a well-defined course of professional training, they can be defended on the ground that it is easier to select for a definite purpose than to determine in a general way a student's fitness for higher studies. Into this category come the competitive entrance examinations, the *concours*, for which the French educational system is famous, and which go back to the early part of the last century. They are highly selective, and usually only a fraction of those who present themselves for the *concours* are accepted. Thousands of candidates apply every year in France for admittance to the *Grandes Écoles*, the highly specialized technical colleges or institutions for the specially gifted, to which France owes her intellectual *élite*. Only a few hundred are accepted for the limited number of places available. Thus of 2,872 applicants in 1910 only 767 were accepted; only 771 out of 4,107 in 1920; 1,281 out of 3,653 in 1930; and 78

¹ *Conference on Examinations*, loc. cit., p. 215.

out of 4,328 in 1933.¹ Students who fail to reach the standards required are not debarred from finding a higher education in other departments or faculties. In this way France assures herself of an exceptionally qualified *élite*, avoids too much hardship on the part of those who have been rejected, sets a high standard for all educational institutions, even those which require no special entrance examination, and incidentally controls the access to at least some of the professions. Even during the worst period of the last economic depression few of the graduates of the *Grandes Écoles* remained unemployed.

Competitive examinations exist in many countries, though not on the same scale as in France. There has been a marked tendency in recent years to limit the number of students admitted to strictly professional studies, by competitive examinations or other methods. This has been particularly true of medical schools and engineering courses. As we are at present only concerned with the problem of examinations it will be more convenient, however, to discuss these measures when we deal with the problems inherent in any *numerus clausus*.

The obvious inadequacies and difficulties to which entrance examinations, particularly of a general kind, give rise have led to the proposal of a 'trial year', though we know of no country in which it has been introduced as a general measure. An examination at the end of the first year spent at the university, combined with the record of work done during this trial year, would decide admittance or non-admittance to further studies. In so far as there are great differences in the methods of work between secondary schools and colleges or universities, such a 'trial year' might prove a useful means of selecting for further studies those who have shown an ability for independent scientific work, particularly if the selection is made dependent rather on the record of work achieved than on a single examination at the end of the year. Such a trial year, *une année propédeutique*, was proposed in France as early as 1927 by the one-time rector of the Sorbonne, Paul Lapie, but, though much has been said about it since, no action has been taken on it. Proposals for a *Probejahr* were made before 1933 in Germany by Schairer, Ulich, and others, but did not lead to concrete results.

¹ R. Chenevier, 'La Formation en masse d'un prolétariat intellectuel', in *L'Illustration*, Nov. 3, 1934.

A somewhat similar proposal, but confined to the faculty of medicine, which was made by Senator Georges Portmann, Professor in the Faculty of Medicine at Bordeaux, met with the same fate. In July 1934, he brought a proposal before the French Senate, in which he combined the idea of a trial year with that of a *numerus clausus* for medical faculties. According to this proposal the various competent ministries would have to evaluate each year the probable needs of the medical profession for further candidates. The number of students admitted to the trial year would be 50 per cent. superior to the estimated needs. One-third of the students thus admitted would be eliminated again at the end of the trial year on the strength of a special examination. Senator Portmann justified his proposal by the overcrowding of the medical profession and added: 'On ne cherche pas à obtenir le diplôme de docteur en médecine pour avoir un titre, mais pour exercer une profession.' This proposal never became law, but part of the examinations for medical students are made more difficult by adding new papers to be written by them in the course of their studies.

Even without introducing a trial year the universities might be able to eliminate unqualified students in the course of their studies. To some extent this is being done, particularly in technical courses, where students who do not get through a certain programme within a limited period are not allowed to continue. Again, some faculties set special examinations after the first or second year, which decide the future educational career of their students. A stiffening of these examinations has undoubtedly led to an increased number of students leaving the universities without a degree. The available statistical material is unfortunately altogether inadequate. The intermediary examinations gain in importance when they can only be set a limited number of times. The new regulations governing medical studies in Austria which were issued in July 1935 illustrate this point: any medical student who fails in four or more subjects of the first *Rigorosum* taken after two years of study is excluded from all further medical studies in Austria; if he subsequently obtains a medical degree in another country it is not recognized in Austria; if he fails in two subjects he may repeat the examination twice; if he fails in only one subject he may present himself three times more. The Belgian report, to which we have referred, proposes that no examination should be

repeated more than once. All these hurdles may be unavoidable in the present state of affairs. Their multiplication, however, can certainly not be considered desirable, particularly if they are not conceived as a means of instruction but of elimination. They are a burden both to teachers and students, above all to those who see in the universities not institutions for cramming but centres of independent learning and research. The adding of ever new examinations or the stiffening of existing ones puts an exaggerated emphasis on the examination rather than on learning and creative thought. The college or the university is in danger of becoming debased to the level of a secondary school. Most tragic of all, the examinations are least likely to do justice to the individual student in those overcrowded institutions where they might be considered most desirable. The large number of candidates is bound to lead to the adoption of mechanical methods of examining, to the detriment of any personal evaluation of a student's abilities by his teacher, which is only possible where teacher and student work in close personal contact.

As regards final examinations we have little to add to what we said at the beginning. Certainly they can and are being made more difficult. The number of 'failures' not only in the examinations but for life is on the increase. Yet this measure, far from relieving the overcrowding of the universities, adds to their difficulties, for those who fail for the first time still try a second and where possible a third and fourth time to obtain the cherished degree. They cannot be blamed: too much is at stake for them. They continue to encumber the institutions of higher learning and to take a disproportionate share of their teachers' time. Their very tenacity is often rewarded. Few examiners will have the heart to reject them altogether—thus final examinations offer very slight protection for the professions which recruit their members from amongst university graduates. Where the professions themselves have instituted admission examinations the situation is hardly better. The conclusion reached in the Survey of Legal Education and Admissions to the Bar in California¹ can be easily generalized: 'When the candidate starts in his law study he has no vested right to continue, but when he gets to the Bar examinations he has spent so much time and money for training that often it

¹ Loc. cit., p. 34.

seems to him too late to turn to another calling. He knows that if he just tries long enough, his chances of finally being admitted are good.'

To summarize: (a) stricter examinations constitute a very inadequate means of combating the overcrowding of the universities; (b) their effectiveness decreases the later they are taken in the educational career; (c) general entrance examinations are to be disparaged, as they leave too much to chance and reveal too little about a student's qualifications for this or that faculty; special entrance examinations for admission to a specialized professional training can be defended on the ground that the basis on which the selection is affected is clearly defined, and that failure to pass such an examination does not prevent the candidate from entering another faculty or course; such examinations may serve to restrict the number of students preparing for highly specialized professional work; (d) school-leaving examinations, while less dangerous than general entrance examinations, should where possible be replaced by a gradual process of selection within the secondary schools, spread over a number of years.¹

RAISING OF FEES AND LENGTHENING OF COURSES

Only a few countries have resorted to raising the fees for tuition, laboratory work, or the use of library facilities. The *décret-loi* of August 10, 1935, increased both the matriculation fee and various faculty fees in France. The Latvian institutions increased their fees by 40 per cent. in 1932. Similar increases were effected in some of the Balkan countries as well as in Austria. Some colleges and universities in the United States raised their fees during the depression; their intention, however, was to procure more income, certainly not to reduce the number of their students. In most of these countries the increase in fees has been nominal rather than real, i.e. it corresponds to a depreciation of the respective currencies. The raising of fees has, nevertheless, been hard on the students, owing to the growing impoverishment of the middle

¹ For further reference see I. L. Kandel, *Examinations and Their Substitute in the United States*, The Carnegie Foundation for the Advancement of Teaching Bulletin No. 28, New York, 1936. Kandel's study appeared after this volume had been written and could for this reason not be fully considered in our text. It constitutes, to our knowledge, the best exposition of the modern view of examinations, and their distributive function. In its emphasis on the need for consideration of cumulative records and for continuous guidance it fully supports our contentions.

classes in particular, for they, as we have seen, provide the bulk of the student populations. The situation has been aggravated by the fact that in many countries scholarship funds have been practically wiped out by currency depreciations, and that exemptions from the payment of fees, or their reduction, can be less easily obtained than before the depression. Instances are not lacking where arbitrary limits have been set, by which only a certain percentage of students may be accorded these facilities; in France, e.g., they are allowed to only 25 per cent.

Fortunately there is at present little indication that these practices are gaining ground. We say 'fortunately', because any such measures tend to reaffirm the privilege which wealth confers and to make the income of a student's parents the main qualification for admission to higher studies. Few would agree with Arturo Labriola, who suggested that, while higher studies pursued for their own sake should be free and accessible to every one, any professional training should be paid for at its full value: 'Le savoir pur doit être gratuit (ou presque); le savoir professionnel doit être payé.'¹ He justifies his demand by saying that any diploma giving the right to exercise a profession confers a monopoly upon those who obtain it, a monopoly for which a heavy price ought to be paid. This implies a conception of professional work which unfortunately seems indeed to be held by some professional people and their organizations, but which is nevertheless to be deplored. The professional diploma, as we understand it, serves to protect the community against the practices of unqualified persons. It is being misused if the right to practise which it confers is exploited to extort monopoly prices for services rendered. The raising of fees for professional courses, to be paid by all students, would doubtless strengthen this tendency, and by reserving access to the professions to a small class privileged by wealth would lead to a prostitution of professional ideals.

The same objections do not prevail, even in the case of a substantial raising of fees, where every precaution is taken to exempt poor but exceptionally gifted students from these fees, or to reduce them to meet their means. A proposal on these lines was put forward by Professor A. Svolos at the first Balkan Universities Conference organized by International Student Service in July

¹ Arturo Labriola, 'Détresse de la jeunesse ou détresse du bon sens?', in *L'Ère nouvelle*, March 3, 1935.

1932 in Sofia, and was unanimously carried. According to this proposal the ordinary fees should as nearly as possible cover the actual expense to the State of the study of an individual student at a State institution. Only those, however, who could afford these fees should be expected to pay them in full. In the case of impecunious but gifted students large reductions or complete exemption should be accorded, in keeping with the income of their parents and their family circumstances. There should be no limit to the number of students who should benefit by such reductions. It was felt that such a measure would help to relieve the universities of many students who were poorly qualified and who only followed a course of higher studies because it was traditional in their families and because they had the means to do so.

A very similar proposal was made by Dr. D. J. Hulshoff Pol, a member of the Limburg Commission in Holland.¹ He suggested that the ordinary fee per year might be raised to as much as fl. 1,000 (between 600 and 700 dollars)—but that only those should pay the full fee whose qualifications were low. The others would be entitled to considerable reductions or even to full exemption. He expected a marked decrease in student enrolments as a result of such a measure. The Limburg Commission refused to make this suggestion its own. This is not surprising. Any such proposal, though defensible on the ground of relieving the universities of some 'dead wood', must remain of dubious value as long as the examinations or other methods of selection remain as imperfect and inconclusive as they are. Furthermore, while such measures may be desirable on the grounds of a better administration of social justice, and while it would certainly be more in keeping with higher education to exclude comparatively well-to-do but unfit students rather than poor but exceptionally gifted ones, it must not be forgotten that the world does not easily adapt itself to reforms which attempt too much at once. The upper middle classes have for so long sent their children, whether gifted or not, to the universities that they have acquired something of a vested interest in them. At the same time they have lost a great deal of their former financial ease, which means that many highly placed officials and professional people would be unable under the proposed regulation to afford a higher education for their children, unless they were so able that they were entitled to reduced fees. One can, therefore

¹ Limburg Report, loc. cit., pp. 129-30.

imagine the storm of protest that would rise amongst them if any one seriously attempted to introduce a measure which would virtually exclude some of their children from higher studies. Thus, while one may work towards such a reform, provided the methods of selection can be improved, it is to be feared that for some time to come its realization will remain a pious hope.

Another cure for the overcrowding in the professions, which has been glibly proposed here and there, is the lengthening of the period of study for a degree. It goes without saying that such a measure, far from relieving the institutions of their surplus of students, is bound to increase their overcrowding. It furthermore affects impecunious students in very much the same way as an increase in fees, and constitutes a premium on wealth. Any arbitrary lengthening of courses is, therefore, anti-social and certainly not in the interest of higher learning. The situation is different where the volume of knowledge and training to be acquired in a professional course has grown to an extent which makes it impossible to master it within the period set. Similarly, professional courses naturally grow in length where the professions, in the interest of improved professional standards, insist on higher requirements for admission. Various professions in the United States have of late shown not only vastly improved professional standards but—contingent on this improvement—steadily growing demands for a better preparation of prospective candidates to the ranks of these professions. Increasingly, a full college training is required of those who plan to enter a law school, while some twenty or thirty years ago this was the exception rather than the rule. The law is thus following the example given by medicine. Or, to give another instance, in America as well as in other countries at least one or two years of study at a college or a university are more and more being considered desirable for primary-school teachers, who some ten or fifteen years ago hardly ever went beyond a high school at best. This lengthening of the preparation-time may *incidentally* and temporarily lead to a decrease in the number of graduates, and thus relieve the pressure on the professions though not on the universities. The lengthening becomes indefensible, however, when it is done irrespective of subjects to be mastered and standards to be attained. Then all the arguments raised against the increasing of fees can be raised with equal or even greater force against the lengthening of courses.

THE NUMERUS CLAUSUS

Any kind of *numerus clausus* differs from the most severely restrictive entrance examinations in so far as it limits absolutely the number of students to be admitted to an institution. A student may honourably pass an entrance examination, and yet be rejected because his marks are not high enough to include him in the limited number of those who are to be accepted. Ordinarily, the numerical limitations are determined by the extent of the educational facilities (places in laboratories or in dissecting-rooms and hospitals), or—and this criterion has gained in importance of late—by the need of new candidates for the professions.

A clear distinction has to be made from the outset between a *numerus clausus* applied to a few departments or faculties and measures which restrict the access to all the institutions of higher learning in all their faculties and departments. Of the first there are numerous examples, the second form has been introduced only in a few countries.

(a) *Limited applications of a numerus clausus*

Of France and the limitations of access to her *Grandes Écoles* we have already spoken. These schools are both the most exclusive and the most democratic institutions in the country. The number of first-year students is strictly limited by the available space, as in most of these institutions the students live within the school. The methods of selection used offer a chance to students in the remotest corners of France, irrespective of wealth or family. Intellectual eminence alone decides their admission. The *École Normale Supérieure* in Paris has by itself probably produced more outstanding men than any other single institution since it was founded. As has been pointed out before, few of the graduates of these schools have remained unemployed even during the worst of the depression. Yet, from our point of view, it would be futile to labour this example of a *numerus clausus* any further. Its object is not to limit access to the universities in general, for alongside of these schools there are usually other institutions or faculties teaching the same subjects and open to all who meet the general requirements. The *raison d'être* of the *Grandes Écoles* is to produce an intellectual *élite*, and in as far as they achieve that end they are at the very heart of the French educational system.

The *numerus clausus* in the approved medical schools of the United States is intended to control the access to one particular profession. The number of students to be admitted to each school is limited, and these limitations are definitely influenced not only by the available space and teaching facilities but also by the probable need for medical graduates. During recent years nearly twice as many students applied for admission as were actually accepted, though the available figures are somewhat misleading, as many students apply at the same time to more than one school. The selection is made primarily on the basis of scholarship. It is difficult to discover whether other considerations play a decisive role. Complaints are numerous that Jewish students find admission more difficult than others, and it is certainly true that the percentage of American Jewish students studying medicine in Europe or elsewhere because they could not enter an American medical school is very high.

In recent years certain technical institutes and other professional schools in America have introduced similar limitations, prompted both by considerations of space and future prospects. However, while these measures have relieved the institutions applying them from too heavy enrolments, they are not likely to influence substantially the supply of new graduates for the professions. They may, and probably will, help to raise standards, but as these schools and institutes are not as well organized on a national basis as the medical schools, they cannot prevent a student to whom they have refused admittance from entering some other institution whose doors are wide open.

On the whole, numerical restrictions are most frequently found in medical schools. The medical faculties of Glasgow and Edinburgh began to restrict the number of entrants in 1933 and 1935 respectively, not for reasons of prospective unemployment but because of the material limits of laboratory and clinical equipment. The number of applicants for the medical faculty in Glasgow has in recent years been in the neighbourhood of 400 a year, while only about 200 were admitted. Edinburgh, too, has limited admissions to 200. Those refused admission were, in both universities, mostly foreigners. Furthermore, the temporary overcrowding of the teaching profession in Scotland has led to the introduction of a quota-system in the Scottish Training Colleges, which in turn caused a noticeable drop in the enrolments of the University Arts Faculties.

The University of Liverpool a few years ago fixed a maximum for medical and architectural students. Again, this was not because of the overcrowding of these professions—though there was some at the time—but because an increased number of students would have meant providing costly new laboratories and studios which the University could not afford. She reflected, too, that the inflow might correct itself in a short time, rendering the increased accommodation useless.

In Norway certain restrictions have been made in the medical faculty, the dental school, and the technical college. Since 1926 only 50 students have been admitted every year to the advanced course of medicine. The reasons given are as usual not unemployment but limited facilities for instruction. This ruling is rather severe, as the number of students finishing the first course has been in the neighbourhood of 150 a year, and some of the candidates have therefore to wait two years before they are able to continue their studies. A proposal put forward in 1930 to limit the number of first-year medical students was defeated by the Norwegian Storting (Parliament).

Following the findings of the Linkomies Commission in Finland a partial *numerus clausus* was introduced in that country. It was applied to the Medical Faculty and the Dental School of the University of Helsinki, as well as to the School of Forestry and the College for Physical Training. The *numerus clausus* introduced in recent years in the Polish institutions goes even farther. Access to all the schools and faculties, except those of law and of literature, has been temporarily restricted. The College of Mining as well as the faculties of Medicine are furthermore setting very severe eliminative examinations at the end of the first and second years of study. Both the Finnish and the Polish measures have been taken with the avowed intent of reducing the overcrowding in the professions.

This list could easily be continued. The moral is clear: most of the restrictive measures were originally taken to overcome the congestion in professional and technical schools. As a matter of fact one wonders whether the comparatively slow increase in the enrolments of engineering schools in most countries, which was demonstrated in earlier pages of this report, was not due to the difficulty of expanding their facilities rapidly enough—a costly process where a complicated apparatus is needed for demonstration.

and experimentation. They were thus the first to see themselves forced to render admission more difficult or to limit the number of their students.

The action of Finland and Poland, however, as well as of the medical schools in the United States indicate that the emphasis is shifting from inadequate teaching facilities to inadequate professional prospects. In itself such a development is to be welcomed. Senator Portmann is right when he says that people do not join a professional course in order to obtain a degree, but in order to exercise a profession. Where professions are overcrowded students ought to be waned, or if necessary prevented, from embarking on a career which will probably lead to disappointment and misery.

The grave question arises, however, who is to decide whether a career is overcrowded? At present the decision is left largely to the professional organizations, which either directly, or indirectly by great agitation, dictate the action of school and university authorities. The Limburg Report, after suggesting that a *numerus clausus* would be desirable for the departments and faculties of medicine, pharmacy, and chemistry, as well as for the School of Engineering in Delft, recommends specifically that advisory committees be set up, composed of professors and representatives of the professions. These committees would advise the Minister of Education how far numbers should be limited each year. Such committees might work in a country like England with her old and honourable professions. In countries where the professional organizations are younger and are still struggling to establish professional standards it is to be feared that too much concern with the present might cloud the evaluation of future prospects. The desire to maintain monopoly prices, or even an altogether temporary overcrowding of a profession due to economic fluctuations, might lead it to clamour for a *numerus clausus* which might render it impossible to satisfy an effective demand for additional professional services five or six years later. To avoid these dangers, and in order not to expose the professional organizations to unjustified criticisms, it appears advisable, therefore, that the collation of facts and the forecast of future prospects should be left to impartial offices or commissions, in which the Government would be represented as well as the public through social workers, economists, and other experts. It needs no emphasis that they would have to collaborate closely with the professional organizations.

The Commissions of Inquiry that have been set up—e.g. in Sweden, Finland, Belgium, Holland—are a step in this direction.

The institutions imposing a *numerus clausus* for professional courses will furthermore have to guard against too narrow restrictions. We have already noted that they tend towards the mechanical device of estimating probable demand by dividing the number of gainfully employed members of the professions by thirty, the average period of service. Where provision is made for additional demand due to expansion, the estimates are usually extremely conservative, notwithstanding the fact that during the first three decades of this century roughly twice as many people were absorbed in intellectual work as might have been assumed on the basis of the estimated demand due to death and retirement. While we may have entered on a period of comparative stagnation, there are yet sufficient indications that the additional demand for highly trained graduates will be greater than was anticipated during the worst days of the depression.

As a further safeguard, it is obvious that any such radical measure as excluding a student from a professional course should not be taken on the strength of a single examination. Every means at the disposal of the secondary and higher schools to test the ability of their students should be brought into play before a final decision is reached. It is also evident that both the professions and the institutions of higher learning will benefit by such a selection only if it is made on the basis of scholarship and other qualifications necessary to a good student, and not on grounds of race or political opinion which have nothing to do with higher studies or professional standards.

(b) *Introduction of a general numerus clausus*

None of the measures hitherto described raise fundamental issues. While they bear heavily on some groups of students their application does not imply any profound change in the purpose of the universities or of higher learning in general. The restrictions dealt with so far are applied only to strictly professional courses. They are not meant as a curb on those who seek higher education for its own sake or who plan to enter courses which are not primarily preparing for some definite profession. The access to some other form of higher education remains free even to those who were refused admittance to courses preparing for certain

professions. Any general *numerus clausus*, on the other hand, breaks radically with the traditional conception of the universities by denying one of their chief functions, which has at all times been the preservation, imparting, and advancement of knowledge, irrespective of utilitarian ends. According to this notion the universities are centres of cultural life open to all whose ability and training enable them to share in the highest intellectual achievements of their country and of mankind. In other words higher education is considered to be a value in itself, which ought to be accessible to every one who can benefit by it intellectually and morally. A general *numerus clausus* subordinates this generous idea to purely utilitarian considerations of professional prospects, i.e. it turns the institutions of higher learning into professional schools; it may even denote a profound mistrust of education as such.

The very passion with which this problem has been discussed in various parts of the world is the best proof that we are indeed confronted with fundamental differences of concept and principle, two conflicting worlds of ideas: the one identified with the philosophy of the democratic countries of the West and those most directly under their influence, and the other most perfectly exemplified in modern Germany.

The democratic countries of the West have been unanimous in rejecting any general *numerus clausus*. The champions of the traditional conception of the university as a centre of intellectual and cultural life open to the best of all classes have stated their position in no uncertain terms. M. H. Fuss, Chief of the Unemployment Section of the International Labour Office, in a spirited attack on what he calls *malthusianisme intellectuel*, speaks of the *numerus clausus* as a 'barbarian conception', hostile to the very idea of cultural progress.¹ Jules Destrée, the eminent professor and Belgian member of the Committee of Intellectual Co-operation of the League of Nations, does not mince his words either: 'C'est là, qu'on me passe le mot, un remède de cheval. La Société risque peut-être d'y perdre plus qu'elle n'y gagnera, puisque ces restrictions à l'entrée ne peuvent qu'appauvrir la culture humaine d'une façon redoutable.'² Graham Wallas defends higher education

¹ M. H. Fuss, 'Pas de malthusianisme intellectuel!', in *Annales Universitaires*, April-June 1932, pp. 3 ff.

² Jules Destrée, 'Les Lumières qui s'éteignent', in *Le Soir*, Bruxelles, April 7, 1934.

as a purpose in itself in the following words: "This thing is too valuable to be merely a matter of earning your livelihood, unless you happen to be a schoolmaster; it is philosophy, wisdom, and the law behind all laws. Spinoza lived by grinding lenses; Grote by being a banker; the way out [of the overcrowding of the professions—*Ed.*] is to teach people that education influences life whatever you are doing, and exists behind and side by side with any paid occupation you may assume. Again, if you are happy enough to have an independent income, you may live by that without having any paid function whatever, just as Darwin or Bentham did."¹ Or, another defence in the words of M. Mallarmé in his ministerial reply to Charles Pomaret in the French Chamber on February 22, 1935:

'Le diplôme n'est pas un titre de créance sur la collectivité. Je sais que depuis longtemps on considère que le fait de faire des études correspond à une élévation dans la hiérarchie sociale et non dans la hiérarchie des esprits. Il faudra désormais se résoudre à s'instruire pour le plaisir. Quant au placement des diplômés, institutions des concours. Mais séparons ce placement de la magnifique mission de l'Université qui est de répandre la culture et l'humanisme aussi largement que possible.'

With such advocates and arguments against it, it is not surprising that the idea of a general *numerus clausus* has made no progress whatsoever in the western democracies.

On the other hand an altogether new conception of the university has arisen in Germany. German universities have, if the expression be permitted, become 'teleological' institutions, the 'telos' being not the advancement of knowledge in general or the education of the individual but the national-socialist State. All learning is relevant only in so far as it serves the interests of that State and the community of the people behind it. And only those are to be educated who identify themselves with this State or are recognized by the State as members of the national community. More important than this: national-socialism in Germany profoundly distrusts anything 'intellectual'. Whether this deprecia-

¹ *Conference on Examinations*, loc. cit., p. 246. As a necessary corollary Graham Wallas himself points out that there are at present few independent incomes in the community and that there will be still fewer fifty years hence which means that the conception of a university and of higher education implied in these statements will only be able to survive if it is accompanied by far-reaching changes in the entire social structure. Certain aspects of these changes will be taken up later on.

tion of the intellect is due, as has been hinted before, to the over-supply of intellectual workers previous to the arrival of Hitler, or to the educational background of the Nazi leaders themselves, the fact remains that to be called 'intellectual' in Germany is about as bad as to be called immoral in another country. It implies that one has become *déraciné*, out of touch with the life of the German people, and without understanding of, or allegiance to, its essential aspirations. Discipline, obedience to the command of the leaders, and physical prowess are virtues far superior to purely intellectual achievements. The introduction of a general *numerus clausus* in German institutions of higher learning, while undoubtedly prompted by the disastrous unemployment amongst graduates, is unthinkable without this change in attitude. This *numerus clausus* is worked according to the new conceptions of the university.

The law of April 25, 1933, against the overcrowding of German schools and universities (*Gesetz gegen die Überfüllung deutscher Schulen und Hochschulen*) stipulates that the number of students is to be limited so as to safeguard the effective training of as many professional people as are needed by the professions.¹ On December 28, 1933, the Minister of the Interior, acting on the law of April 25, 1933, ordered that only 15,000 of the 1934 graduates from secondary schools should be allowed to enter German institutions of higher learning. Actually, 15,979 students were given the 'Hochschulreife', i.e. a certificate of eligibility enabling them to enter a German university. This represents 40.37 per cent. of all who in 1934 left the secondary schools in Germany, after having successfully passed their final examinations.² The reduction is

¹ Before this law other measures of a less stringent character were taken. Thus the state authorities in March, 1933, agreed to regulate the admission of secondary-school graduates to the universities. Examination committees in all schools were required to note in the record of each candidate whether he should be discouraged from proceeding to a higher institution; the decision was to be transmitted both to the parents of the candidate and to the universities if requested. Students who despite contrary advice persisted in going on to a university were not to expect any facilities and were to be re-examined at the end of the first three semesters. As these and other measures were superseded by the law of April 25, 1933, there is no need to enlarge on them. (For further details see the well-documented article by I. L. Kandel, 'The Making of Nazis', in the *Educational Yearbook of the International Institute of Teachers College, Columbia University*, 1934, pp. 415-551.)

² Those of the graduates of secondary schools who were not given the certificate of eligibility for higher studies were referred to the 'Reichsanstalt für Arbeitsvermittlung und Arbeitslosenversicherung' (National Institute for Employment and Unemployment Insurance) for purposes of reorientation and placing

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obvious, considering that between 1930 and 1932 nearly 30,000 students had each year entered the universities.

The actual limitation in numbers is less interesting than the criteria of selection. A certain leeway was left to the then still existing sixteen provincial authorities, each of which was given a quota to be filled (Prussia: 8,984 students; Lippe: 12 students), but it was prescribed for the whole country that apart from intellectual aptitudes character and national reliability (*nationale Zuverlässigkeit*) should be the determining factors for the selection. Sincerity of outlook (*Lauterkeit der Gesinnung*), bodily prowess (*körperliche Tüchtigkeit*), and a capacity for comradeship and devotion, in accordance with the national-socialist view of the State, were also to be considered. The German civilization of Hitler being a man-made civilization that exalts the masculine virtues of heroism, physical power, and military discipline, it is easily understandable that not more than 10 per cent. of the newly admitted students in any province were to be women, not counting those who intended to become primary-school teachers. It was furthermore only consistent with the prevailing racial theories in Germany that the number of Jewish students was to be reduced to 1.5 per cent. of the total student body in any given university, a very harsh measure which led to the immediate exclusion of some 7,000 Jewish or 'non-Aryan' students and the suspension of the admission of further Jewish students.¹

It is striking to note that most of the qualifications to be considered—race, sex, brawn, political fitness, &c., are altogether foreign to those which are generally held essential for the pursuance of higher studies. The non-intellectual or openly anti-intellectual character of the measure was further accentuated by handing over its administration not to the schools alone, but also to the mostly national-socialist governors of the various provinces (*Oberpräsidenten*) who, whenever there was any doubt about the political reliability of a candidate, was to consult with the party district leader (*Gauleiter*).

The whole portent of the *numerus clausus* legislation, both in its positive and negative aspect, cannot be grasped without looking at

in non-academic careers. Employers were urged to find room for these secondary-school graduates as apprentices or learners.

¹ To our knowledge this suspension is still in force and the number of Jewish students still in German universities is negligible.

certain supplementary measures such as the introduction first of voluntary and later of compulsory 'work-service'. It would go too far to trace in detail the origins of these measures. The idea that students should come out of their sheltered cloisters, that they should overcome the remoteness of the universities and devote part of their time to manual work, belongs to some of the leaders of the German Youth Movement. As early as 1928 they set up 'work camps' (*Arbeitslager*), mostly in poor communities, to which they offered their services for work of public utility—improvements on the land, soil conservation, road-building, &c.—which owing to lack of funds could not otherwise be performed. They invited beside students young unemployed workers, who shared both in their work and in their discussions. The motives were a desire to serve the community and to reach a better understanding and a sense of fellowship with the under-privileged. It was both a generous and a wise initiative, testifying to a high sense of social responsibility among the best of German youth.¹ The movement was very successful and in 1931 the German Government decided not only to generalize it and open camps for unemployed youth all over Germany but to lend it financial support.² As a result more than 260,000 young people under 25 were working in such camps during the second half of the year 1932. Many of the camp leaders were students.

At about the same time Reinhold Schairer and his collaborators in the Deutsches Studentenwerk proposed a compulsory work-year for all students, both in order to break down the barriers separating the universities from the life of the German people and—this is particularly important—in order to relieve the numerical pressure on the universities.³ No student should be admitted to a university

¹ The work-camp movement has found many *literati*. The following publications give the best picture of the early beginnings of the movement: *Studentische Arbeitslager*, A report prepared in 1932 by the Department of Self-Help and Co-operative Organization of the International Student Service in Geneva. This Report contains also a survey of similar movements in Switzerland—where the first camp was organized in 1925—in Wales, and in Holland. *Das Arbeitslager, Berichte aus Schlesien von Arbeitern, Bauern, Studenten*, edited by Eugen Rosenstock and Carl Dietrich von Trotha, Jena, 1931. Georg Keil, *Vormarsch der Arbeitslagerbewegung, Geschichte und Erfahrung der Arbeitslagerbewegung für Arbeiter, Bauern, Studenten, 1925-32*, Berlin and Leipzig, 1932.

² For the sake of American readers it may be added that at that stage the German Work Camps strongly resembled the C.C.C. Camps which were organized by the Roosevelt Administration and which were undoubtedly influenced by the German experience. ³ Reinhold Schairer, *loc. cit.*, pp. 96 ff.

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without having spent one year in manual work in a camp. This measure would during one whole year relieve the universities of first-year students and thus help, at least temporarily, to overcome the overcrowding of the universities. It was furthermore hoped that the work-year would tend permanently to reduce the number of students: many prospective students might find such satisfaction in manual work as to give up the idea of an intellectual career; besides, representatives of the universities and of the State were to share in the life of the camps, observe the students, and help them in the choice of their future activities.

National-Socialism took over many of the ideas which inspired the earlier stages of the work-camp movement, and there can be no doubt that most of the positive aspects of the work-service as it has been developed since 1933 can be traced back to those students who started their first camp in 1928. German students have lost most of that academic pride which separated them from the people, they have as a body acquired a strong sense of social responsibility, they no longer look down upon manual work and manual workers, and many of them who originally planned to enter a university have turned to other occupations. National-Socialism has also added something of its own: it has put the participants of the camps into uniforms, it has under the name 'Geländesport' introduced military drill, it has used and is using the camps as a means of political indoctrination.

Prussia was the first to establish a special work-service for students.¹ The period of service was limited to six months and participation was voluntary, though only those who had been to a camp could count on such facilities as remittance of fees. Gradually the work-service lost its voluntary character and was made compulsory all over the country for men and women students from the first to the seventh semester.² No one can to-day enter a German institution of higher learning unless he has served a period of six months in a camp. Only those may be excepted who have rendered signal service in a Nazi organization such as the S.S. or the S.A.

¹ Ordinances of the 'Ministerium für Wissenschaft, Kunst und Volksbildung' of Feb. 8 and March 11, 1933.

² For further details see Dr. Karl Keller, 'Das Studium an den deutschen wissenschaftlichen Hochschulen im Sommer 1934 und Winter 1934/5', in *Deutsche Hochschulstatistik*, vol. xii, Berlin, 1935, pp. *3 ff. Also: 'Der deutsche Student', *Zeitschrift der deutschen Studentenschaft*, Feb. 1935.

Students of Catholic theology may also be excepted, but they cannot count on any help from the 'Reichsstudentenwerk', the organization administering the scholarship and loan funds and other student aid institutions. 'It is evident that public funds can only be spent on students who are at one with their national community and who have gone through the "School of the Nation" [i.e. work-service—*Ed.*].'¹

We have dealt at some length with the evolution of the German work-service into a hurdle to be taken before admission to a university, because it is important under two aspects. First, it shows better than the *numerus clausus* legislation that modern Germany is not just mechanically barring access to higher education, but is making real efforts to divert young people to non-academic occupations in which there may be better prospects for earning a livelihood than in the professions. It also reveals something of the social philosophy behind the *numerus clausus*: if there is anything positive in the anti-intellectualism of the Nazi leaders it is their crude attempt to make sure that those who are admitted to the universities are socially minded and in close contact with the workaday life of Germany. Secondly, the development of the work-service had to be traced because it has had a profound influence on student enrolments ever since 1933, which makes it difficult to evaluate the actual results of the *numerus clausus* legislation and to compare student enrolments before 1933 with those of the following years. Ordinarily, students in Germany entered the universities during the summer term, after having passed their *Abitur* at Easter. As a result of the six months' work-service, which was made compulsory in 1934, we observe since 1934 that many more enrol in October than in the spring. Besides, a considerable

¹ Communication from the 'Reichsstudentenwerk', in *Studium und Beruf*, vol. v, July-Aug. 1935, p. 109. The German text of the above quotation is as follows: 'Es ist selbstverständlich, dass aus öffentlichen Mitteln nur ein volksverbundener Hochschulnachwuchs, der durch die "Schule der Nation" gegangen ist, gefördert werden kann.'

Incidentally, Roman Catholic theological students are from another point of view also a thorn in the flesh of the régime: they are vowed to celibacy at a time when everything is being done to increase the birth-rate. Dr. W. Hartnacke, the former Nazi Minister of Education in Saxony, deplores the fact that the number of students of Roman Catholic theology is increasing: 'It is certainly unfortunate (keinesfalls günstig) if at a time when the nation is biologically threatened the access to occupations which impose celibacy is on the increase' (Dr. W. Hartnacke, 'Das Verebben der akademischen Hochflut in volksbiologischer Betrachtung', in *Volk und Rasse*, no. 1, 1936, p. 6).

number delay matriculation even beyond the six months they spend in a camp, owing to military service or special work in party organizations, with the result that it is impossible to determine at present how many of the graduates of secondary schools of the year 1934, let alone 1935 or 1936, will in the long run avail themselves of a higher education. Thus the decrease in student enrolments during the last few years is in part fictitious—many may only have delayed their studies, willingly or under compulsion, and may help to swell student numbers during the years to come. Yet the decrease of first-year students and of the total student body is so formidable that there can be no doubt about the efficacy of the *numerus clausus*, the work-service, and the general anti-intellectual propaganda. Total student enrolments have decreased by more than 40 per cent. during the three years between 1932 and 1935, the last year for which official statistics are available, as shown in Table XVI.

TABLE XVI. *Total student enrolments in German institutions of higher learning, 1932-5*

	Men	Women	Total
Summer term, 1932	108,990	20,616	129,606
Winter term, 1932/3	103,416	19,431	122,847
Summer term, 1933	97,687	18,035	115,722
Winter term, 1933/4	91,263	15,501	106,764
Summer term, 1934	82,698	13,132	95,830
Winter term, 1934/5	74,857	12,008	86,865
Summer term, 1935	66,623	10,506	77,129

Germany has to-day again about as many students as she had in 1913. The wheel of history has at least in this respect been turned back twenty-three years.

The enrolment figures for first-year students show a similar decline, as indicated in Table XVII.

The figures for 1928-32 have been included because they demonstrate that before 1932 a yearly arrival of 30,000 first-year students was 'normal'. The figures for the following years reveal two striking facts: (1) the particularly marked decline in women students, which in the light of the 10 per cent. limit is of course perfectly understandable; (2) the fact that the total enrolments for the year 1934/5 did not reach the number of secondary school graduates (15,979) who at Easter 1934 were given the *Hochschul-*

TABLE XVII. *Enrolments of first-year students in Germany, scholastic years 1928/9-1934/5*

Year	Men	Women	Total
1928/9	26,037	4,647	30,684
1929/30	25,251	5,269	30,520
1930/1	24,563	6,243	30,806
1931/2	23,557	6,149	29,706
1932/3	19,953	4,561	24,514
1933/4	17,245	3,584	20,829
1934/5	12,190	1,699	13,889

reife Work-service and service in the army are responsible for part of that deficit. Whether they can explain it altogether is doubtful. The very criteria which governed the dispensing of the *Hochschulreife* singled out as future students young people whose whole inclination was towards life in the army or the party organization rather than towards strenuous intellectual exercise. It is probable, therefore, that a large number of them have been only too relieved to find occupations outside the precincts of the universities. No one knows how many have done so, but it is striking that less than 14,000 matriculated in 1934/5 as against nearly 16,000 who had been given the *Hochschulreife*. Even this figure was only reached by admitting quite a number (exact data are again unknown) of secondary-school graduates who had originally not been given the *Hochschulreife*.

The decrease in the number of students was so alarming¹ that on February 9, 1935, Dr. Rust, as Minister of Education for the Reich and for Prussia, issued a decree in which he stated that it was no longer necessary to fix the number of secondary-school graduates who might proceed to the universities. In other words he abolished the *numerus clausus* in its most stringent form. This decree, however, by no means ends all restrictions. The measures against the studies of women or of Jews and 'non-Aryans' remain in

¹ The 'reform' of the German universities affected the number of foreign as well as German students, in spite of the fact that they were not only exempted from all restrictions but that great efforts were made to induce them to come to Germany. Ever since 1924 their number had been oscillating around 7,000. Under the new régime it dwindled to 4,350 in 1934 and 4,464 during the winter term 1934/5. This decrease can be only partially explained by transfer difficulties, for these reduced the number of foreign students in other countries also, yet the decrease there was much smaller than in Germany. The explanation is probably that the new ideas of learning and the new spirit of the German universities decided many foreigners to seek an education elsewhere.

full force. The criteria of selection also remain the same, and definite limits are set for various universities and colleges, beyond which they may not grow. The maximum number of students allowed to study during the year 1935/6 is 6,900 at the University of Berlin; 1,700 at Frankfurt; 2,600 at Cologne; 5,400 at Munich, &c. If more students apply than are necessary to fill these quotas the following categories are to be preferred, according to a decree of September 11, 1935:

- '(a) Old combatants of the N.S.D.A.P. up to and including membership number 1,000,000;
- '(b) Members of the armed forces, if they prove that they study by order of the military authorities and in preparation for their future work in the army;
- '(c) Students who have pursued their studies for two or more terms at the Universities of Königsberg and Breslau, or at the Technical Colleges of Breslau and Danzig.'

Students from Königsberg, Breslau, and Danzig are given preference so as to encourage study at these places which are near the German frontiers.

There is no need for much further comment. The application of a *numerus clausus* in Germany and the way in which it has been carried out cannot be considered as an emergency measure. It means nothing less than the end of the university as we understand it, and as it was understood in Germany up to the arrival of the national-socialist régime. A new type of university is arising, and it is too early to judge whether its achievements will measure up to the past of the German universities or even to the hopes of those who have created it. One thing is certain: the problem of the overcrowding of the universities has at least temporarily been solved. We may expect that, as the reserve army of unemployed university graduates of earlier days gets absorbed, the number of those who leave the universities will correspond more nearly to the demand due to death and retirement. As the present enrolments allow hardly any margin for additional demands, we may even anticipate that as time goes on, and provided there are no fundamental changes in present educational policies, Germany may be faced with an acute shortage of highly trained people in some of the professions.

¹ 'Erlass des Reichs- und Preussischen Ministers für Wissenschaft, Erziehung und Volksbildung vom 11.9.35', in *Studium und Beruf*, vol. v, Oct. 1935, p. 171.

The only other countries which saw fit to introduce a general *numerus clausus* were Bulgaria, Esthonia, Greece, Hungary, Latvia, and Romania. Having explained in some detail the working of the *numerus clausus* in Germany we shall be able to confine ourselves to a short summary of the measures taken in these countries.

Bulgaria. A general *numerus clausus* for all faculties of the State University in Sofia was applied for the first time during the year 1932-3. Even within the various faculties it was considered necessary to limit the number of admissions to certain courses. Thus 75 students were admitted to study mathematics, 23 physics, 22 chemistry, and 50 the other natural sciences. These figures were determined by the university authorities themselves on the basis of available educational facilities, and after consultation with the Ministry of Public Instruction concerning the probable needs of the professions. The Free University of Sofia, the only other university in the country, in its turn imposed a *numerus clausus* in 1935-6. The total number of first-year students was limited to 500, though 1,500 applied. The selection in both cases is made exclusively on the basis of the candidates' school marks.

Many students attempted to evade these restrictions by studying abroad, notwithstanding the very strict currency regulations which allow for the legal transfer of funds only by students taking up subjects which are not taught in Bulgaria (engineering, dentistry, pharmacy, &c.). During the year 1935-6 nearly 600 students contrived to go to foreign universities.

Esthonia. In 1934 the Senate of the University of Dorpat decided not to accept more than 500 new students during each of the years 1934 and 1935. The total enrolment in the University of Dorpat has, in recent years, varied between 3,000 and 3,500. Thus the newly enforced restriction may be considered as a measure to prevent further increase rather than to reduce the present number.

Greece. The University of Athens, apart from Salonika the only university in Greece, introduced in 1933 both a special entrance examination and a *numerus clausus*. Thus the number of first-year students in law was fixed at 500, of medicine at 300, &c. It led to a great deal of undesirable pressure and interference from outside, and patronage was so brought into play that the number of law students actually admitted was nearly 1,400. No conclusive information about developments during the years 1934-6 could be obtained.

Hungary. A *numerus clausus* for most of the institutions of higher learning was introduced in Hungary as early as 1920. Every year only a certain number of students were to be admitted to the universities, according to the prospective needs in the professions. Apart from scholarly qualifications, determined by the leaving examination at the

end of the secondary school, the race and religion of the candidate was to be considered. The law has undergone certain changes in recent years, and some of the stipulations directed against Jewish students were, as a result of a protest to the League of Nations, not abolished but rendered less offensive to the Jewish population. Nevertheless, the most tangible result of the *numerus clausus* has been a decrease in the proportion of Jewish students. In 1913-14 28.4 per cent. of the students were Jewish, while in recent years they have constituted approximately only 10 per cent. of the student body. The number of first-year students in general has been gradually reduced from about 5,000 during the years 1920-4 to about 3,000 in recent years. The Veterinary and the Agricultural Colleges are under no restrictions.

Latvia. Mention has been made of the severe entrance examination to the Latvian University in Riga. It is a competitive examination, as the number of admissions to the university is limited. This arrangement goes back to the first years after the War, when the number of applications only slightly exceeded the number of places. In 1925, for instance, 1,364 students sat for the examination, of whom 1,045 were accepted. In 1932 the number of applicants had risen to 2,220, of whom only 1,335 were accepted, or roughly 60 per cent. The competition has grown very keen, particularly in the faculty of medicine and in the dental school, which in 1932 admitted only 25 per cent. of those who had applied. As will be remembered, some of the professions are in spite of these measures badly overcrowded, and the ratio of students to population is high. As a matter of fact the restrictions have been made in the light of available educational facilities and not from the point of view of future professional prospects.

Romania. The medical faculties of Romania were the first to enforce a *numerus clausus*. Starting with the year 1928-9, only about 50 per cent. of the students taking the entrance examination to the medical faculties of any of the four universities were admitted. In June 1935 the *numerus clausus* was extended to all faculties and schools. Thus the University of Bucharest, which during the years 1927-30 had had well over 20,000 students, was given a quota of 2,760 first-year students. The quotas were estimated on the basis of available space and facilities and not in relation to future demands for intellectual workers. Those who framed the ordinance, chief amongst them Constantin Kiritzesco, had the problem of unemployment firmly in mind, but they felt, in the words of Kiritzesco, 'that it is impossible seriously to evaluate, even approximately, the development of future demands in the various branches of intellectual labour.'¹

As the introduction of the *numerus clausus* coincided with a prolong

¹ Loc. cit., p. 55.

tion of the secondary-school courses by one year, the effect of the new restrictions has not yet made itself felt. All those who ordinarily would have left the secondary schools during the summer of 1935 will, owing to this prolongation, be eligible for the university entrance examinations only in the summer of 1936. Those who entered the universities in 1935 represented a residue of secondary-school graduates of earlier years. Thus the quotas under the new *numerus clausus* were not even filled.

The example of these six countries is not particularly encouraging. In Bulgaria many of those who are determined to get a higher education have found ways and means to obtain it abroad. Latvia and Esthonia have avoided overcrowding of the universities, but could not, or did not even attempt to, end the overcrowding in the professions by way of limitations on enrolments. The measures in Greece seem to have broken down. Hungary remains the one country in which the unemployment of university graduates is probably most acute. And Romania will at earliest feel the effects of the newly imposed *numerus clausus* on the professions after 1940. How far they will influence the situation in the professions is admittedly beyond the ken of those who prepared the new law and are now administering it.

Yet in comparison with what has happened in Germany there are certain redeeming features. Taken by and large not one of the restrictive measures imposed by the smaller countries went as far as the *numerus clausus* in Germany. They did not result in a substantial decrease in total student enrolments, but rather served to avoid an unlimited expansion of higher education at a time when large numbers of people remained illiterate, and when certain types of secondary education (intermediate technical training) were still under-developed. Both Romania and Bulgaria, e.g., are making efforts to improve their intermediate technical schools. Most important of all, with the possible exception of Hungary and perhaps Romania,¹ the selection of students is made on the basis of scholarship and not of all kinds of external criteria. Even in Hungary it has to be said, in justice to the educational authorities, that they never considered excluding all or even the majority of Jewish students, and that the Hungarian students admitted were

¹ The complaints that the *numerus clausus* in Romania, particularly in the medical faculties, is used as a pretext to eliminate Jewish students are frequent. In spite of the absence of conclusive statistics there is little doubt that the percentage of Jewish students has substantially decreased.

chosen not because of their political opinions but of their scholastic record. In other words the *numerus clausus* in these smaller countries is not, as in Germany, motivated by a profound distrust of higher education and by an evident anti-intellectualism. In so far as it is designed simply to prevent overcrowding of the universities, as in Latvia and Esthonia, it serves to uphold the best possible standards of higher learning.

If we attempt to draw any final conclusion from what has gone before, it is to confirm the statement at the beginning of this chapter, that the universities, as long as they remain what they are, have only limited means at their disposal for controlling student enrolments, particularly where they attempt to establish a balance between supply and demand for university-trained people. On the other hand any measures applied to the universities from the outside, as has been done in Germany, raise exceedingly grave issues which affect the very basis of all higher education.

VII

INFLUENCING THE MARKET FOR INTELLECTUAL LABOUR

THE policy of *laissez-faire* is a thing of the past. To-day it is only to be found in text-books and in the speeches of outmoded or unscrupulous agitators who continue to plead for or against a system which has ceased to exist. Both liberal governments and dictators have found it necessary or desirable to control the economic affairs of their citizens or to curtail individual initiative. True, the degree of control varies from country to country, and the purposes for which the control is exercised vary from the preservation and strengthening of an agreed social peace, through the establishment of systems of social security, to the realization of imperialistic dreams and aspirations through the marshalling and co-ordination of whole nations. It is not for us to evaluate or analyse these respective aims. We are only concerned with the fact that in the liberal and democratic countries, as well as in those under totalitarian rule, unfettered individualism is to-day but a happy memory or a nightmare, according to the economic point of view.

The market for intellectual labour could not escape the controlling hand of the State. The dangers inherent in a large army of dissatisfied unemployed intellectual workers did not remain unheeded. The measures taken to help this army of unemployed can be roughly grouped under three headings: *emergency measures* to meet acute situations; *restrictive measures* by which foreigners, women, old or unqualified people are prevented from competing in the labour market; *distributive measures* intended to spread the intellectual workers more evenly among the various professions or over different parts of the country. Both government agencies and professional organizations have played an important role in the preparation and enforcement of these measures.

In setting forth in some detail what has been done in the various countries we are in the fortunate position of being able to use as sources not only the replies received from our collaborators but also a rich collection of documents brought together by the International Labour Office in Geneva and the International Institute

of Intellectual Co-operation in Paris.¹ We are particularly indebted for help and constructive advice to M. Maurette, Deputy-Director of the I.L.O., and his colleagues Mlle Schmidt, MM. Fuss, Tait, Artus, and Mequet, as well as to M. Bonnet, Director of the Paris Institute, and his collaborator M. Lajti.

1 RELIEF THROUGH WORK AND FURTHER TRAINING

Professional workers and more particularly young university graduates are only rarely included in the general schemes for unemployment insurance. Being excluded from the benefits which these schemes offer in case of unemployment, unemployed intellectual workers have had to be helped by special *ad hoc* measures designed to relieve their immediate needs. The majority of countries have seen themselves obliged to resort to such measures. They range from provision of the cruder forms of manual work to the creation of highly specialized emergency jobs, which give the unemployed intellectuals full scope to use their special training and abilities. Again, they are either altogether temporary or likely to lead to more permanent positions.

Public works and work camps

There can be no doubt that there are even to-day thousands of university graduates throughout the world who eke out a meagre living by digging ditches or doing menial jobs out of all relation to their original training. They must content themselves with being admitted as simple workers under the various schemes of public

¹ In order not to burden this chapter with cumbersome footnotes we refer to the following documents which have been used *inter alia* as a basis for this chapter:

Mesures prises pour combattre le chômage des intellectuels, Rapport préparé par l'Institut de Coopération Intellectuelle pour la 10^{ème} Session du Comité des Organisations internationales d'Étudiants; C. 112, 1935, Paris, 1935. (This report was compiled from information received from public and private sources in thirty-three countries.)

Mesures prises dans certains pays pour combattre le chômage des intellectuels, Supplément au document C. 112, 1935, Paris, 1936.

'Remedies for Unemployment among Professional Workers', in the *International Labour Review*, vol. xxxiii, no. 3, March 1936, pp. 304-36.

Much useful information can furthermore be found in the reports of the Advisory Committee on Intellectual Workers of the I.L.O. (particularly the report on *Recruiting and Placing of Professional Workers*, C.C.T.I./iv/a, 1933) and in the periodical publications of the I.L.O.: *Industrial and Labour Information*, and of the Paris Institute: *Coopération Intellectuelle*.

works instituted by the authorities. This form of public assistance has the advantage that it brings home to the white-collar workers—the collar, if they still possess one, being only a symbol of early aspirations—the community of interest between the world's workers of every kind and description. It may also help them to keep body and soul together, but certainly does not enhance their chances of finding work in their own line. Prospero may be their dream, their fate is Caliban.

The German Work Camps and the C.C.C. Camps in the United States constitute a certain advance over this most primitive form of public assistance through emergency work. The public work service in Germany, as established in 1931 on a voluntary basis and rendered compulsory in 1935, offered work not only to students but to a certain number of graduates, many of whom served as leaders in the camps. But even where they entered as ordinary workers they could expect to secure regular work more easily after leaving the camps. They were to be given preference when applying for jobs, and the Institute for Employment Exchanges and Unemployment Insurance established an elaborate system of vocational guidance for them and the other categories of workers in the camps.¹ Similarly, a number of unemployed college graduates found positions as educational advisers in the C.C.C. Camps in the United States, while those graduates who were admitted as ordinary workers benefited by the general programme of re-training and guidance instituted in the camps.

In general it is, however, true that the various forms of work-service, while important from an educational point of view, have done little to relieve unemployment amongst university graduates. Certain other measures, which also were not primarily intended to assist intellectual workers, have proved of greater importance. Thus it is evident that many engineers, architects, and others have found employment as an indirect result of public works designed to provide employment on a large scale. This fact is so general that no examples need to be given. Others have found employment in various types of relief organizations, public or private, and other agencies born of the depression. In the United States tens of

¹ For further details see the report of the International Labour Office submitted to the 19th Session of the International Labour Office entitled: *Chômage des Jeunes Gens*, Geneva, 1935, pp. 120-8 and 156-7. (This report was published in English under the title *Unemployment among Young Persons*.)

thousands of new workers were taken on by such agencies as the Works Progress Administration (W.P.A.), the Federal Emergency Relief Administration (F.E.R.A.), the National Youth Administration (N.Y.A.), and other capital-letter organizations. No statistics are available of the number of college graduates amongst these new office-holders, but it is undoubtedly very substantial.

Finding emergency jobs for brain workers

Special relief work, as far as possible in line with the specific training of the unemployed professional workers, constitutes the next step in the campaign against the unemployment of intellectuals. A great deal of ingenuity has been applied to the discovery of suitable work and the means to finance it. In *Austria*, e.g., employment has been provided in libraries, in the Federal Statistics Office, in surveying, in the record offices of government departments, in the Meteorological Office, &c. The remuneration varies from 40 to 60 cents per day. When discussing the unemployment situation in *Bulgaria* it was pointed out that work was not lacking but that the disastrous financial situation prevented the employment of additional workers. The Bulgarian Government concentrated, therefore, on financial measures. Since 1934 a law has been in force by which all those in private employment and earning more than 6,000 leva (\$50-60) per month pay from 3 to 10 per cent. of their salary into a common fund which provides the salaries for newly employed intellectual workers under 30 years of age. They are largely given work in the enterprises whose employees contribute to the common fund. Thanks to this income 570 unemployed professional workers in Sofia alone, of whom 116 had a full university training, had been given work by December 1935. In *Esthonia* relief work has been provided in libraries, record offices, statistical offices, &c. In *Finland* similar work has been created both by the Government and the municipalities, which acted under government orders.

In *France* relief work has been organized by the *Entr'aide des Travailleurs Intellectuels* (E.T.I.), a subsidiary organization of the French Confederation of Intellectual Workers. The E.T.I., itself a private organization, obtained the support of the Government, which in 1935 issued a special postage stamp to be sold at a slight surcharge. By May 1936 more than 500,000 French francs had been raised by the sale of this stamp, and a new issue was in pre-

paration. Sixty-five intellectual workers had been given work, which included such varied activities as cataloguing, statistical inquiries into the unemployment of brain workers, the observation of the solar eclipse in Liberia, the writing of articles on French civilization in foreign magazines, &c.¹ In *Germany* a programme of scientific work of public utility has been organized by the Institute for Employment Exchanges and Unemployment Insurance; a first subsidy of RM. 400,000 was voted for this purpose early in 1934.

It has been stated that the professions in *Great Britain* have suffered less than those in other countries from the depression, and that they cannot be considered overcrowded. Yet, as an example of what can be achieved by private initiative and in a spirit of professional solidarity, the work of the Architects' Unemployment Committee deserves special mention. The Committee was formed in 1931, and obtained all its funds from voluntary donations and subscriptions from members of the architectural profession and sections of the building industry. By 1933 eighty architects had been employed on various architectural surveys, the charting of maps, and the making of architectural models.

In *Japan* substantial sums have been devoted to the creation of relief work in government offices, schools, and libraries since 1929. The number of days of employment provided for in 1929 was 114,224; in 1933 1,369,509; in 1934 1,241,702. In *Poland* the Employment Fund devoted a million zloty to the organization of this kind of work in 1935. Only a small part of this fund, however, was used for intellectual workers with university training.

The *United States* have, both in absolute and relative terms, done more than any other country to provide emergency jobs specially suited to professional workers. These jobs were created in addition to the positions which became available through the development of large-scale public works. National white-collar work relief projects began to take shape under the Civil Works Administration (C.W.A.), and gained in importance under the F.E.R.A. and later the W.P.A. In April 1935 a special federal appropriation of \$300,000,000 was allotted for this group. The

¹ The issuing of special stamps in aid of unemployed intellectual workers has not been confined to France. Early in 1935 the Government of the Duchy of Luxemburg issued a whole series of stamps in favour of refugee intellectual workers. The proceeds from the sale of this series were turned over to the International Committee for Refugee Professional Workers in Geneva.

projects were national, state-wide, and local in scope, and were devised so as to place unemployed professional workers in jobs for which they were well fitted. It is quite impossible to enumerate even the most important of the projects put into operation. There are Federal writers', theatre, arts, and music projects; special projects for architects, such as the 'Historic American Buildings Survey', which was allocated nearly \$450,000 as early as 1933 in order to give work to 1,000 architects; projects which provided work for teachers in re-training and adjustment courses, the teaching of leisure-time activities, &c., elaborate projects in hospitals, libraries, and museums; five projects for the advancement of education in the United States;¹ and many others.

It needs no emphasis that all the public and private efforts to give emergency jobs to unemployed brain-workers—and the list of projects and schemes could easily be prolonged—were not made to help only college and university graduates. Many of the schemes we have noted have benefited primarily clerks, musicians, technicians, and others who had no higher education. When people are starving, the dividing line between the various groups of intellectual workers, which even in normal times it is difficult to draw, becomes practically obliterated. They all want work and they have little opportunity to choose. Only as the methods of relief become more refined is it possible to create special opportunities for college-trained people, enabling them to use their specific gifts and training, as is done by some of the American projects or those of the *Entr'Aide des Travailleurs Intellectuels* in France. It is also obvious that most of the emergency work provided has been allocated irrespective of age. Yet, speaking of college-trained people only, it is certain that the age-group under 35 has obtained the lion's share of the newly created work, both because this group has suffered most from the prevailing unemployment and because they were found most adaptable where adaptation was needed.

¹ These five projects, which are administered by Mr. J. W. Studebaker, the Commissioner of Education, are amongst the latest attempts to provide work for intellectual workers. They will, however, not only provide work; if they are successful they may well mark the beginning of important reforms in several fields of American education. They are divided as follows: (1) University research, under which such problems as 'Student mortality in institutions of higher learning' and the 'Economic Status of College Alumni' are to be studied; (2) establishment of adult public forums throughout the United States; (3) the study and development of vocational education and guidance for Negroes; (4) an educational radio project; (5) a study of local administrative school units.

Further training and periods of probation

It is also this younger group for which yet another form of help has been made available. We have in mind schemes which emphasize not so much the securing of temporary work but the provision of further opportunities for education and perfection in the various lines of training. Where young people of pre-college age are concerned, the raising of the school-leaving age is obviously the most effective method of relieving the market of surplus labour. As these measures do not, however, affect college and university graduates except in so far as they provide new positions for teachers, and as they should not be considered as emergency measures, we need not concern ourselves with them at the present moment. Effective steps enabling graduates to use their enforced leisure for further training have been taken above all in the United States. In the earlier days of the depression many colleges and universities allowed graduate students to stay on for another year, not only remitting all fees but at times providing even board and lodging. During the year 1933-4 the Federal Student Aid Programme (see p. 29) came into operation. It will be remembered that under that programme undergraduates were given government subsidies, or rather a remuneration for work created for them or secured by the college authorities. They were thus enabled to go to college, or, if already there, to continue their studies. Later on this privilege was extended to graduate students. Under the National Youth Administration at present responsible for this programme, the rule was established that graduate students might earn up to \$30 per month and in exceptional cases even more (upper limit for undergraduates: \$20) and thus be able to pursue specialized studies after graduation. By October 1935 4,500 graduates were being maintained in institutions of higher learning in addition to some 106,000 undergraduates. Whether these graduate students use their time wisely, or receive adequate guidance to put to the best possible advantage their additional time for study, cannot be generally determined. The generous initiative of the Federal Government, however, is certainly a constructive attempt to deal with a section of the young intellectuals unable to secure work in time of crisis.

That such an attempt need not be confined to a large and financially powerful country has been shown by the example of

the Polytechnical School in Switzerland. The acute unemployment of its own graduates led that institution to organize in January 1934 the so-called *Praktikantenhilfe*. A previous effort to place graduates as probationers with various industrial enterprises and for a limited period had failed to absorb all the graduates. Under the new venture recent graduates were given a modest remuneration and work in the institutes and laboratories of the Polytechnical School. Each *Praktikant* was assigned to a professor under whose guidance he performed specialized work in line with his training and interests. The necessary funds were provided by the Association of Old Students of the Polytechnical School (20 per cent.), the Swiss Confederation (40 per cent.), and the Cantons from which the graduates originated (40 per cent.). According to Professor Honegger¹ the experiment has proved a complete success. The additional training received by the graduates increased their employability. Of the seventy-nine graduates who benefited from the venture between January 1934 and March 1936, only 29 per cent. remained the full nine months for which they had been taken on. All the others had found work before the end of that time. The Polytechnic itself benefited considerably from the experiment, as it was enabled to take up work and research which owing to lack of personnel had had to stand over. Finally the measure helped to avoid an unjustified and dangerous decline in student enrolment, an important point considering that the unemployment of engineering graduates in Switzerland was primarily due to the depression and therefore not likely to last.

The importance of placing graduates as probationers in public services and private enterprises was emphasized in a resolution adopted in April 1935 by the Committee of International Student Organizations, meeting under the auspices of the International Institute of Intellectual Co-operation.

The Committee realizes the very great importance of temporary employment for young graduates as probationers in the public services and in private enterprises, not only as a simple method of providing useful work for a large number of young professional workers but also as a means of enabling the young graduate, fresh from the University, to continue his studies and to make certain that he is right in his proposed choice of a career. But it must be clearly understood that the

¹ 'Praktikanten an der E.T.H.', Advance copy of an article to be published in Swiss magazine.

young graduates thus employed, although they receive remuneration, must not take the place of other employees; the main purpose of their engagement should be to give them practical training.¹

The recommendations concerning unemployment among young persons adopted by the International Labour Conference in June 1935 also contains a passage concerning probationers:

'14. In the case of persons unable to secure employment on the termination of secondary, technical, or higher studies measures should be taken: (a) to enable such persons to supplement their theoretical training by obtaining practical experience in industrial, commercial, and other undertakings and in public administration, every precaution being taken to prevent such persons displacing regular workers.'²

The warning sounded in both these recommendations that probationers should not replace regular employees is only too well founded. The temptation to accept probationers and pay them a pittance where otherwise a person with full salary would have to be appointed is great, both for public authorities and private undertakings. Austria, e.g., which in 1926 barred the access to most state careers, lifted this barrier in the autumn of 1933 only to accept 1,200 *Aspiranten*, i.e. probationers, who were given less than a living wage. Even to-day young teachers are often taken on only as probationers, with a salary of approximately \$20 a month. Similarly Germany has prolonged the preparatory period, on part salary or none, in a number of state careers. These measures may be necessitated by the public finances, but they are certainly undesirable and should be abolished at the earliest possible moment.

Conclusions

In evaluating the various emergency measures designed to provide temporary work for unemployed brain-workers and particularly college and university graduates, it is obvious that the various schemes are of very uneven value. To oblige highly trained

¹ 'Remedies for Unemployment among Professional Workers', in *International Labour Review*, loc. cit., p. 315. The warning about replacing regular employees also applies to labour camps and to some extent to special relief works. In the former the pay is usually a mere pittance; in the latter it is usually a good deal more, but still less than the normal pay. The sort of work done in the C.C.C. Camps (reafforestation, flood-control, &c.) does not compete with outside labour, but that is not true of camps in certain other countries.

² *Ibid.*, pp. 325-6.

intellectual workers to earn their living by digging ditches or shovelling snow is certainly a form of assistance to be resorted to only *in extremis*. To provide such work through the organization of labour camps is also a *pis-aller*, unless it is the primary purpose of the camps to give the graduates an experience of manual work for educational purposes.

On the other hand many of the efforts to provide work in keeping with the qualifications of the unemployed brain-workers are truly constructive. It makes little difference in this respect whether the jobs are part of a general scheme for counteracting economic depressions or of a special scheme to employ intellectual workers. The main advantage is that the relief worker is able to maintain and to develop his skill while putting his learning and education at the service of the community. He is thus enabled to uphold his morale and to keep fit for permanent employment if and when it becomes available.

Even more important is the fact that some of the new opportunities for work, which were intended to be temporary, show signs of becoming permanent. In the United States, to mention only one example, impartial observers are realizing that many of the new government activities are not necessitated merely by a passing emergency but also by the growing complexity of American life in all its aspects. As the United States grow into a single national and economic unit, more power is bound to accrue to the Federal Government, which will require a vastly larger and better-trained civil service to discharge its duties. Again, as individual Americans find it more and more difficult to make a living in a country which is unable to extend still farther its economic frontiers, provision will have to be made to assure to every decent and hard-working citizen a minimum of social and economic security. Temporary relief schemes may thus be turned into schemes for social insurance, for the provision of better health services on a co-operative basis, &c. In the words of the *New York Times*: 'As regards the long-time implications of white-collar projects, the observer is almost sure to conclude that many of the services now being performed by white-collar relief workers are really functions of a permanent civil service.'¹ And a few paragraphs farther on the same article comes to the conclusion: 'In the light of these assumptions it is at least a tenable theory that work relief will diverge

¹'Brain Workers on Relief', in the *New York Times*, July 5 1936.

more and more from home relief, that it will rest more and more on the individual's ability, less and less upon his need, and that it may in time accomplish the permanent transfer of a large group of workers into a new field.' If these expectations are fulfilled—and there is every reason to believe that they will be, not only in the United States but also in other countries—then the various emergency work schemes will have accomplished a great deal. They will not only have helped the professional classes in a period of stress, but by providing new services of social usefulness they will have led to the absorption of additional professional workers. It must not be forgotten that in many countries the professions are not only suffering from unemployment due to the economic depression, but from an 'over-production of intellectuals' leading to the creation of a large reserve army of white-collar workers likely to persist even in days of prosperity unless additional opportunities for work can be opened up.

II. RESTRICTIVE MEASURES

The struggle against foreign competition

In view of the prevailing xenophobia all over the world, it would indeed be surprising if the restrictions on the labour market were not, to begin with, directed against foreigners. In a section of the press of some countries the impression is given that most or all unemployment would disappear if only the foreigners were not allowed to exercise their occupations or professions. Many of the student strikes and disturbances in recent years, particularly in Europe, have been inspired by anti-foreign sentiments, in spite of the assurances of the leaders that they only wanted to see the national market for intellectual work protected against unfair foreign competition. The number of resolutions passed by professional organizations demanding legislation against foreign competitors is legion. The legislators have gone a long way to meet these demands; and where no special legislation has been passed, governmental decrees and administrative orders have often effectively prevented or at least made it extremely difficult for foreign practitioners to establish themselves.

When we consider these measures it becomes obvious that the criteria for the establishment of foreign professional workers have changed substantially in recent years. Before the War, and even

during the first years after the War, most countries were content to require that the foreigners whom they allowed to take up work should live up to the standards of professional skill and conduct of their own nationals. Various methods were used to ensure this: in some cases it was left to professional organizations or Government offices to grant permission, on inquiry into the antecedents and training of the applicants; in other cases foreign graduates were obliged to repeat their final examinations in order to be allowed to practise; in many instances, however, Governments concluded bilateral agreements by which they recognized the validity of degrees obtained in one another's countries and allowed the holders of them to practise. Most of these methods, while helping to maintain professional standards and protect both the public against unqualified practitioners and the professions against unfair competition, were not intended to keep out the foreigner. Some of them, such as the agreements recognizing equivalence of degrees and reciprocity in permits to work, actually stimulated the emigration of professional workers. They did much to further co-operation in learning and professional work, and helped to draw the nations together. A most helpful and well-documented report of the International Labour Office¹ gives some figures which indicate for several countries the proportion of foreign professional workers at various dates. In the Argentine in 1914, 31 per cent. of all the brain workers with and without university degrees were foreigners; in Brazil in 1920, 15 per cent. According to the Canadian statistics of 1930, 30 per cent. of the intellectual workers in the country had been born abroad (mostly in Great Britain and the United States). In the same year the figures for France and Switzerland were 6 and 10 per cent.

The present-day practices of most governments differ greatly from the liberal policies of the pre- and post-War period. Degrees and attestations of professional skill mean very little: the passport has become the all-important document. With the heightening of the economic crisis and the growing unemployment in the professions, quotas for foreign workers, including college and university graduates, have been introduced in many countries (Belgium, Romania, Spain, &c.). Others have made permission to practise certain professions contingent upon naturalization.

¹ *Equality of Treatment in the Domain of Professional Work for Nationals and Foreigners*, C.C.T.I./v. 2, 1935.

France, in the past one of the most liberal of countries, is becoming more and more protectionist. The incessant and skilful propaganda of various professional organizations, which are determined to liberate themselves from all foreign competition, has led to a series of laws which virtually exclude foreign doctors and lawyers, even though they may have received all their higher education in France. The *Loi Armbruster* of April 21, 1933, declared that graduates of French Medical Schools might only be admitted to practise if they obtained the State Diploma, which is issued only to those who have been admitted to French institutions of higher learning after having passed the *baccalauréat*. In other words it put an end to the recognition of the school-leaving certificates of foreign countries. The student strikes of early 1935 led up to the passing of another law (July 26, 1935) by which only French nationals might practise medicine in France. Naturalized citizens were required to perform their military service or wait five years after naturalization before they could be admitted to medical practice. A law of July 19, 1934, imposes even more far-reaching restrictions upon the practice of law. French nationals only are admitted to serve as lawyers or public administrators; foreigners have to wait ten years after naturalization before they can be admitted to legal practice. Both in medicine and law certain exemptions are allowed on a reciprocal basis, but they change little in the draconian character of the new laws. Most of the other careers requiring professional training are protected indirectly, but most effectively, by the fact that foreigners are not allowed to work without obtaining a labour permit from the Government, which is hardly ever granted. As a result of all these measures the establishment of foreign professional workers in France has become almost impossible.

Most other European countries also have introduced or tightened regulations regarding labour permits both for manual and intellectual workers. They are almost entirely inspired by the determination to protect national labour, with the result that permits are only granted in exceptional cases, even where there is no special legislation against the admission of foreign professional workers.

Germany is unique in the sense that the national-socialist régime first of all created a class of foreigners by depriving the Jewish people and their descendants of their political rights, and then proceeded to eliminate them from the economic and above all

the professional life of Germany. According to the racial theories of the new rulers no Jew or descendant of Jews can think or write German or have the same professional standards as prevail amongst Germans of pure blood. The Jew is a foreigner, who not only must not compete with German workers, but must not be allowed to contaminate the purity of German thought or action. Just as in the economic field Germany must as far as possible be made 'autarkic', German intellectual and professional life must be cleansed of all foreign influence. The measures resulting from this philosophy, beginning with the Law for the Restoration of the Professional Civil Service (*Gesetz zur Wiederherstellung des Berufsbeamtentums*) of April 7, 1933, are too well known to need detailed enumeration.¹ On a moderate estimate some 10,000 professional men and women with university training lost the right to exercise their professions, while an equally large number who, because they had established themselves in professional work before 1914 or because they had outstanding war records, were not turned out were yet exposed to every kind of discrimination, which gradually deprived them of their livelihood. In the universities and colleges alone some 1,400 professors, *Dozenten*, and assistants were dismissed, often without pensions. These measures led, as is well known, to one of the greatest migrations in modern times. The exodus of university teachers exceeded even the migration caused by the Russian Revolution of 1917. Incidentally it is interesting to note that of the 6,000-7,000 professional workers with university training who left Germany, the university teachers, though by no means all of them obtained new positions, found it on the whole easier than other professional groups to continue their work in foreign countries. The way they were received and helped by their foreign colleagues is proof that at least in one field of human endeavour international solidarity and the realization of the oneness of learning prevailed over nationalist conceptions and narrow economic interests.

Some countries, finally, starting with the assumption that any foreigners who might graduate in the country could only with difficulty be prevented from staying there and competing with

¹ For further details see the appendix to the letter of resignation of the Hon. James G. McDonald, League of Nations High Commissioner for Refugees coming from Germany, addressed to the Secretary-General of the League of Nations, Dec. 27, 1935.

national labour, increased the difficulties of entering their universities. By Royal Decree of September 15, 1933, the Minister of Public Instruction of the Netherlands was empowered to withhold from students of foreign nationality the right to study in Holland. A further decree of May 31, 1934, barred all foreign students from sitting for the final examinations necessary to follow a profession in that country. A similar though less far-reaching measure was taken in Switzerland, where only Swiss nationals or students from countries which admit Swiss nationals to practise are allowed to take the final examination in medicine, dentistry, pharmacy, and veterinary science.

In view of these strong anti-foreign trends it is all the more remarkable that some countries have found it possible to maintain more liberal policies. Thus the British Medical Association, controlling the Medical Register in Great Britain, agreed to the establishment of up to 200 German émigré doctors. In the United States approximately 300 have obtained their licences since 1933. Palestine admitted more than 200 refugee physicians, and the U.S.S.R. some 150, while China accepted about 30 émigré doctors provided they did not establish themselves in the great ports. Italy and South Africa are two further countries which in recent years have continued to accept foreign physicians and other professional workers. We quote these exceptions regarding the practice of medicine, because it is the medical profession in most countries which has been most intransigent and also most successful in preventing the admission of foreigners.

It is hardly necessary to point out that most of the present-day protectionist tendencies are as unreasonable as they are regrettable. While they can be explained in some instances, e.g. the practice of law, by the fact that a practising lawyer or a legally trained administrator is called upon to serve as a trustee of the State or of the law of the country, and therefore ought to be fully integrated in the life of the country before he is allowed to practise, no possible justification from a professional point of view can be conceived for special laws discriminating against foreign physicians, in spite of full medical qualifications and readiness to serve loyally the country of their adoption. Not considerations of competition, but solely of competence, ought to be admitted in the field of truly professional service. Disease, as well as the means to combat it, is not confined to national frontiers. The ideal would be that

those countries in which education is more or less at the same level should accept the equivalence of degrees, and subject foreigners only to the restrictions to which they subject their own nationals. Foreigners would then be debarred from practising only when nationals of *the same standing* were unable to follow their profession. Similarly, foreign students entering a university might be asked whether they intend to remain in the country and to exercise their profession there after the completion of their studies. If the answer were yes, they would be subjected to the same restrictions as nationals of the country. Once admitted to the university on grounds of competence, having passed the barriers erected against nationals and foreigners alike, they ought to be treated on exactly the same footing as the nationals. This would be infinitely more worthy of that universality of learning which has been the guiding principle of the universities for many centuries.

As a measure for overcoming the unemployment in the professions, which to-day is an *international* problem, the exclusion of foreigners from professional work is obviously futile. Those barred from exercising their professions will only help to swell the number of the unemployed elsewhere, and increase the army of dissatisfied men and women who see their only salvation in the overthrow of the existing order. Even from a purely *national* point of view the narrow protectionist policies are of very doubtful value. They cut both ways, and any country closing the professional careers to foreigners may expect to see its own nationals barred from obtaining work abroad. There are, of course, exceptions to this rule. Yugoslavia, for instance, is giving employment to about 2,000 foreign engineers, while more than 500 of her own engineers find it impossible to secure employment. A large proportion of the foreign engineers are White Russians who for political and perfectly understandable sentimental reasons have made no effort to obtain Yugoslav citizenship, which would easily have been granted them. In such a case it is comprehensible that efforts are being made to reserve vacant places for Yugoslav citizens, and to replace some of those who refuse to become naturalized by citizens of the country. Any other policy would not only be contrary to popular sentiment but would endanger the development of technical colleges and courses in Yugoslavia, which were only instituted after the arrival of the foreign engineers. Yugoslavia, together with other Balkan and overseas countries, is

only gradually building up a system of technical schools, whose growth will for some time to come require certain measures of protection for their graduates. Apart from these exceptions it can only be hoped that with a return to improved economic conditions, both professional organizations and governments will again prefer professional skill and learning to national passports.

Discrimination against women

Only a few countries have seen fit to restrict the enrolment of women students. To the example of Germany we need add only that of Austria, where the Medical Faculty of the University of Vienna decided in 1934 to deprive women students of all such privileges as remission of fees, granting of bursaries, &c. The decision was taken on the ground that the prospects for women physicians were hopeless. On the other hand measures to restrict the employment of women graduates are general. In some countries discrimination against all women is gaining ground, in others it is chiefly directed against married women. In some, women's positions are endangered mainly in the public services, and in others the difficulty is felt just as much in private posts.

During the years 1934 and 1935 the International Federation of University Women conducted an inquiry amongst its member associations regarding the position of professional women. The results were summarized in a most instructive report on *The Status and Employment of Women Intellectual Workers*.¹ Much of the information reproduced in the following paragraphs is based on this report.

Amongst the countries which have introduced general rules against the employment of women as professional workers are Austria, Belgium, France, Germany, Holland, Italy, Romania, and Yugoslavia. No legislative measures have been taken in *Austria* against unmarried women, but administrative decrees have greatly decreased their number in public employ. By decree of December 8, 1934, the Ministry of Labour and Social Welfare in *Belgium* was authorized to fix by quota the percentage of women, married or

¹ *The Status and Employment of Women Intellectual Workers*, Report (mimeographed) presented to the Tenth Session of the Committee of Representatives of International Student Organizations, Geneva, April 10-11, 1935. An abridged French version of this report appeared under the title 'La Situation légale et l'emploi des femmes diplômées', in *Coopération Intellectuelle*, nos. 55-6, pp. 363-71.

single, in each branch of industry, in order to secure that any further posts should be filled by men. To our knowledge this decree has never been put into operation. Similarly, in *France* the percentage of female staff in the administrative offices has been fixed at a figure varying from 33 to 50 per cent. of the whole personnel; more important from our point of view than this measure, which affects primarily the personnel in inferior positions, is the fact that the admission of women to positions of responsibility in various government services, begun owing to the scarcity of male candidates immediately after the War, has been suspended. In *Germany* a multitude of measures, legal and administrative, has made access to most of the professional careers extremely difficult for women. This process continues. In the near future women are to be altogether excluded from being judges in German courts, in spite of the highly meritorious work they have accomplished in children's courts, divorce courts, &c. This contemplated measure has evoked some outspoken criticism even in the German press.¹ Although no legislation has been passed in *Holland* forbidding unmarried women to work, the Government has asked that wherever possible women shall be replaced by men. In *Italy* restrictive legislation has reduced the number of women in public service, and particularly the number of women teachers in agrarian and industrial technical institutes. In *Romania* an attempt was made, and temporarily defeated, to introduce laws prohibiting medical women from holding government appointments in country districts and excluding women teachers from boys' schools. Various measures were taken in *Yugoslavia* to reduce the number of women, both married and unmarried, in State employ.

Another way of discriminating against women consists in paying them lower salaries than men. This phenomenon has been so general ever since women entered the professions that it would serve no useful purpose to quote specific examples. Suffice it to say that the tendency to cut women's salaries out of proportion with the cuts suffered by men during the recent depression has been very marked.

Nearly as general are the measures to restrict or prohibit the employment of married women. Apart from a few countries such as *Italy*, the *Irish Free State*, *Sweden*, *New Zealand*, and the *U.S.S.R.*, such restrictions are in force practically everywhere.

¹Die Richter'in, in the *Frankfurter Zeitung*, July 21, 1936.

Even in *Great Britain*, the European stronghold of feminine rights, it is only in exceptional cases that women civil servants or employees of local authorities are not required to resign on marriage. This restriction affects a very large number of women: teachers, medical officers of health, health visitors, as well as those engaged in general clerical duties. Similar tendencies, though not as general, have become more pronounced also in the *United States*. *Italy* is the only country which gives preference to married women in filling the limited number of positions available to women in the state administration. Measures against the employment of married women are generally defended on the ground that in a time of economic stress it is not desirable for husband *and* wife to earn salaries and thus to have an income sufficient to maintain two families. More will have to be said on this in the next section, when the question of multiple employment is discussed. It is also often held that to be employed outside the family is bound to interfere both with a woman's home duties and with the work she is paid to do.

We do not propose to enter on a general discussion of the discriminatory measures against women professional workers. On the women's side this discussion is ably led by such organizations as the International Federation of University Women. We shall content ourselves with summarizing the arguments whose validity seems to be beyond serious doubt.

The most fundamental objection to the discriminatory measures against women intellectual workers is that they take little account or none of the outstanding achievements of women in most of the professional careers. In research and in teaching, as administrators and executives, as physicians or lawyers, they have accomplished work in no sense inferior to that of their male colleagues. Considering that they have only been admitted to the various professions during the last forty or fifty years and that they were handicapped by all kinds of prejudices and by complexes due to centuries of life under exclusive male domination, these achievements are most remarkable and ought to have exploded the myth that women are incapable of certain types of professional work or of intellectual effort as such. Any restrictions directed against all women professional workers, irrespective of type or qualifications, are therefore not only unjust but likely to deprive mankind of important discoveries and services. At the same time only a few

extremist feminist organizations will deny that by and large women are more particularly suited for certain types of work. They bring with them a certain intuition and sensitiveness, an attention to detail and very often a sense of measure, qualities which are only too often absent in men. They are thus called not only to an important place in education, as physicians or social workers, but also to help in the administration of justice, and last but not least in the councils of the nations. The attempt to deprive them of their positions in all these fields can only lead to one result: the reaffirmation of our man-made civilization, with its emphasis on force rather than understanding, on the destruction of life rather than its preservation, on extraverterd material gain rather than spiritual growth. Realizing that we are talking in very broad generalizations to which there are notable exceptions—*vide* the super-chauvinist attitude of certain women's organizations, captivated by the charm of the generals and dictators who address them—we believe for all these reasons that the exclusion of women from professional work is a relapse into an atavistic form of society which bodes ill for the future. To pursue this argument would clearly go beyond the scope of our report.

It is obvious that many of the anti-feminist measures are inspired by the mere unadulterated egoism of the male of the species. It is significant that women are most often excluded from the higher ranks of the civil service, from the more advanced grades in schools, from the better-paid positions, while no objections are raised to their doing menial jobs at low wages. This exclusion from the best positions, and the fact that women are paid less than men even where they hold identical jobs, reflect the determination of man to preserve a monopoly which in most parts of the world he has held for centuries. Professional women more than any other group of women workers suffer from this situation, for which there is no excuse.

This male egoism is often covered up with a false solicitude for the 'woman's place in the home'. She is to be restored to her family to fulfil the noblest function reserved to women, the bearing of children. There can be no doubt, fortunately, that the overwhelming majority of women, including the most learned women graduates, aspire to a home and a family. However, four problems arise at once. First of all, not even the most powerful dictators have been able to overcome the disproportion between men and

women, decreed by law of nature, and accentuated by man-made wars. Short of introducing polygamy, a substantial proportion of women must remain single. Secondly, technical progress and the introduction of labour-saving devices have revolutionized the home. There are many successful professional women who have single-handed raised large families. Or they have engaged servants, which relieved the labour market in another direction. To relegate these professional women to their homes and keep them there will therefore only create unemployment elsewhere. Thirdly, it must be realized that many marriages during the last twenty years would have been altogether impossible had it not been for the fact that the women had saved enough to be able to think of marriage or had continued to contribute to the family income. This argument can of course be countered by such measures as that of the German Government, which advances up to *RM.* 2,000 to young couples intending to get married, or by other measures to improve the economic status of families. Finally, there is little doubt that large numbers of women will be better satisfied and more mentally alert, and therefore better able to educate their children, if in addition to their home obligations they are able to follow their chosen career, instead of having their world confined to the space between bed and kitchen stove.

These general observations may by some be considered irrelevant in a study dealing with the economic aspects of professional work. This is a mistake, for any measures intended to relieve the market of intellectual labour of a surplus supply have to be analysed in their repercussions upon intellectual progress and civilization in general. Not only jobs and incomes, but philosophies and social orders are at stake. However, even from a purely economic point of view, the measures directed against women in the professions are not likely to achieve what is expected of them. A consideration of cold facts reveals that at the beginning of the economic depression, and in spite of the educational and professional emancipation of women, the number of gainfully employed professional women had remained small and that the number of those who can be displaced is therefore comparatively speaking unimportant. In the United States, where the share of women in professional work is larger than anywhere else, there were, according to the 1930 Census figures, only 8,388 women to 151,532 men in the medical profession; 3,385 to 157,220 in the various branches

of the legal profession; 113 to 226,136 technical engineers; 379 to 21,621 architects; 1,905 to 45,163 chemists; 3,276 to 145,572 clergy, &c. Only in the fields of teaching and nursing, where the figures include a majority of people without a full college training, did the number of women exceed that of men (teaching: 880,409 women to 244,111 men; nursing: 228,737 women to 5,452 men).¹ In other words the share of women in the professions has in most cases, and with the exception of teaching and nursing, remained below 5 per cent. of the total employed in professional occupations, and this in a country where women students represent nearly one-half of the total student enrolment. This fact shows clearly that women graduates do not need the more or less gentle pressure of laws and decrees to find their place in the home. Only a fraction of them prefer their careers to a family. As regards the rest, including teachers and nurses with college training, it can be safely assumed that—apart from those who feel a genuine calling to their careers and therefore ought not to be barred from them whether they are married or not—a large number of women graduates are obliged, for economic reasons, to seek gainful employment. To displace them simply means to shift the burden of unemployment from one group to another. The number of those who have no particular aptitude for their work and who might by dismissal be forcibly induced to marry, or who would be able to maintain themselves single without work, is probably so small that measures directed against them would hardly affect the market. It goes without saying that what is true of the United States applies *a fortiori* to all the other countries, where the territory conquered by professional women is even smaller, and where in most instances they represent a minority in the higher grades even of the teaching profession.

It must not be forgotten, finally, that certain types of professional work have been created by women. It is characteristic of intellectual work that by its very quality it creates additional demands. The exemplary work of women as social workers, factory inspectors, or judges in children's courts, for instance, has done much to develop various social services and to convince the public of their utility. If women are to be ousted from the posi-

¹ Sophonisba P. Breckinridge, *Women in the Twentieth Century*, A study of their political, social, and economic activities, New York and London, 1933, pp. 188 ff.

tions they themselves have helped to create, it is to be expected that after a while the jobs will disappear with them. The cutting down of various social services and the diminution of the power of juvenile courts in various Central European countries points that way. In other words, gainfully employed women are being forced into the ranks of the unemployed and yet no new positions become available for men.

In the light of all these considerations it stands to reason that discrimination against professional women is on the whole a most unsatisfactory and ineffective, and in some cases positively harmful, method of relieving overcrowding in the professions.

Prohibition of multiple employment

The movement for the suppression of multiple employment can be traced back to the early Christian centuries. Beginning with the Council of Chalcedon in the year 451 and throughout the Middle Ages the Church made repeated attacks upon the *praesumptiones et quorundam cupiditates* which characterized those of its office-holders who attempted to hold more than one living. Human frailty led to the failure of most of these efforts. At the beginning of the French Revolution in 1789 the lower clergy were accusing their superiors of the same vice and demanding in the National Assembly 'la suppression du luxe intolérable et scandaleux des prélats et surtout l'interdiction de l'entassement des bénéfices sur une seule tête'.¹ The secular authorities were no more successful in their efforts to act against human greed. We owe a volume of material, which for obvious reasons it is impossible to reproduce, to Dr. Ladislav Acsay, one of our Hungarian collaborators, showing that from the fifteenth century onwards the Hungarian kings tried vainly to curb the zeal of their subjects in acquiring ever new positions in order to increase their incomes.

Thus the problem of multiple employment is by no means of recent date. It is not surprising that the movement for its suppression should have gained in strength at a time of acute unemployment. Measures have been demanded and applied to prevent persons from holding two public posts simultaneously, from occupying a public and a private post, or from drawing a pension and accepting remunerative employment. A second

¹ Abbé Augustin Sicard, *Le Clergé de France pendant la révolution*, Paris, 1912, p. 29.

category of measures is designed to prevent two or more members of the same family who are living together from occupying paid positions. This, as has been pointed out, generally means the prohibition of the employment of married women.

A few examples will suffice to demonstrate the nature of these measures. *Bulgaria* has evolved the most elaborate system of all to combat multiple employment. Public officials are not allowed to hold more than one post and are prevented from doing outside work for pay. But even physicians, lawyers, and private teachers are forbidden to work for more than two private institutions. Most interesting and far-reaching, however, are the regulations which were passed against multiple employment in official positions within one and the same family.¹ Maximum family incomes have been fixed according to the size of the family and the type of education and training received by its members. If the sum total of the income derived from salaries or other sources exceeds the maximum laid down by the law, the salaries of the second or third working member of the family are reduced by the amount exceeding the maximum. The person working at the reduced salary has, however, to give up his position altogether if the reduction represents more than 25 per cent. of the normal salary. Later on these regulations were applied also to people in private employment. In spite of these draconian laws the results obtained have not been satisfactory, partly because it was found impossible to evaluate the private income of the various families, and partly because of strong opposition on the part of employers who were threatened with the loss of trusted employees. On the other hand they have made possible the employment of a certain number of young graduates, as the sums economized by the reduction of salaries have actually been used to employ them as probationers. *Estonia* took a similar though less complicated course in an Act of 1933, which provides that when two members of the same family are employed in the public services and either of their salaries exceeds a certain figure one of them must resign.

In *Italy* retired State officials are not allowed to seek remunerative employment. The Fascist Confederation of Professional Workers has for some time been campaigning for the extension of this rule to all pensioners. In *Great Britain*, on the other hand, a pensioner may still obtain employment in the public services,

¹ *Journal Officiel*, no. 167, 1935.

but the amount of his pension is deducted from his pay. A similar measure was recently proposed by the Administrative Council of the Bureau Universitaire de Statistique in France.¹

The case of *Hungary* is of interest not so much because of the legislative action taken against multiple employment, which was practically confined to forbidding secondary-school teachers to give private lessons—a measure which gave work to some eighty unemployed—but because of the campaign conducted by the unemployed themselves against the ‘job-snatchers’. In 1931 the ‘Mefhosz’, a representative Hungarian student organization, in co-operation with an organization of young unemployed graduates addressed an appeal to the Hungarian authorities and the Hungarian public, protesting against the lack of attention paid to the moral and economic misery of the young unemployed and demanding above all the suppression of all multiple employment. But the organization did not confine itself to pious protests. Special posters were printed, showing a prosperous gentleman sitting on a multitude of jobs, represented by bricks, and squashing to death a miserable-looking young man buried under the bricks. The legend read in large letters: ‘Here lives a job-snatcher.’ These posters were hung all over Budapest at the doors of people who had accumulated several remunerative posts. The number of high government officials and of influential personages who saw their houses thus adorned was substantial—a fact which, according to many, explains why the campaign did not lead to the wished-for results. The use of publicity to discourage all-too-eager collectors of jobs is also being contemplated in Article Seven of the draft law submitted to the French Chamber of Deputies by M. Pomaret.² By the terms of that Article the French Government is requested to publish the reports of the Committee of Inquiry set up in the summer of 1934 to investigate multiple employment amongst State officials.

That the problem is not confined to the western world is shown

¹ *Plan d'action contre le chômage intellectuel*, Paris, 1935 (mimeographed), Resolution No. 7. This *Plan d'action*, which can be obtained from the B.U.S., 110 rue de Grenelle, Paris, contains in addition a series of proposals concerning the admission of foreigners to professional work, the protection of titles, the organization of emergency work, &c. Several of these proposals have been embodied in a draft law submitted to the Chamber of Deputies by M. Charles Pomaret and a number of his colleagues (*Proposition de Loi tendant à assurer le placement immédiat et régulier de la jeunesse française*, Chambre des Députés, Session de 1936, no. 151).

in a passage of the Saptu Report for the United Provinces of India, which reads as follows:

'Another cause of unemployment in the case of our young men is that men who retire upon the completion of their service seek employment in local bodies such as municipalities and district boards and Courts of Wards, &c. We are strongly of the opinion that such men should not be employed as against those who are young and qualified to enter Government Service. A man who has retired on pension has at least something to fall back upon, whereas a young man who has qualified himself for Government Service and does not get employment, and ultimately becomes unemployable, is a dead loss to his family and society and becomes embittered and discontented.'¹

The idea behind all these measures and proposals is sound: it is indeed intolerable if the *beati possidentes*, not satisfied with one paid job, accumulate others at a time when there are large masses of unemployed for whom even the smallest position might mean the difference between life and slow death. Yet the desire to set free as many posts as possible for those in search of work must not be allowed to obscure certain difficulties. *First*, the economic situation of many professional workers or their families is often so precarious that they are forced to seek additional work. It is therefore a *sine qua non* for the success of all efforts to suppress multiple employment that men should be assured of an income allowing them to live according to their station in life. In other words, not the fact that several jobs are held by one person or within a family should be decisive, but the fact that the income derived from these jobs exceeds the socially justifiable limits. These limits will of course vary from country to country according to prevailing social and economic conditions. *Secondly*, it must be clearly understood that the places set free are actually filled by unemployed professional workers. It is unfortunate that such truisms have to be stated, but it often happens that restrictive measures are applied for reasons of economy rather than to provide additional employment. *Thirdly*, it is desirable that exemptions be granted where they are in the public interest. Men or women who render exceptional services in more than one paid position might see their incomes curtailed² if these become unreasonably large, but they

¹ Loc. cit., p. 111.

² The danger exists obviously that, wherever additional services rendered outside a man's main occupation are legally forced to be paid below current rates, those who can offer such services will be sought after and preferred to

should not be prevented from rendering the services. There is no reason why an eminent scholar teaching at a technical college should not be prevented from receiving an exorbitant fee for an opinion given to a private firm or a government department, but everything speaks against forbidding him to give such an opinion simply in order to provide work for less qualified people.

A final word. The best-thought-out laws and regulations will cause social unrest rather than peace so long as those who hold the key positions in state offices and private concerns are allowed to evade those laws, as long as they pile job upon job and add income to income. The worst that can be said about the measures against multiple employment is that they have only rarely attempted and hardly ever succeeded in putting an end to this anomaly.

Lowering the retiring age

There is hardly any association of students or young graduates in Europe which has not at one time or another advocated that the retiring age be lowered. It is a step which has rallied the support of most of those who have the fate of the younger generation at heart. Yet when we think of the multitude of measures taken against foreigners, against women, or for the suppression of multiple employment, it is at first sight surprising how few countries have in recent years actually lowered the retiring age of professional workers. On the one hand this reluctance is, of course, due to economic reasons, as many governments consider it impossible under present circumstances to pay full pensions plus the salaries of those who are to take the places vacated by pensioners. On the other hand it is understandable that those who are to retire, and who often are at the levers of command, are not particularly anxious to commit even a mild form of *hara-kiri*. People, at least in many professions, keep fit longer to-day than in the past, and having worked all their lives they envisage with misgivings the prospect of early retirement, even where they are assured of a pension more or less equal to their salary. The situation is even

those who are entitled to the full rates. Such a development would not only render it even more difficult for the unemployed to secure work but it would tend to depress the general level of wages and salaries. In order to avoid this danger it is suggested that the employers, public or private, should be obliged to pay the full rates, the difference being paid into a central fund to be used for employing additional professional workers. To our knowledge Bulgaria is the only country which has followed such a procedure.

more difficult in the case of the liberal professions, such as medicine and law, in which independent practitioners cannot count on a pension. Matters are particularly difficult to-day, when in many countries life-long economies have dwindled away, owing to the depreciation of currencies (i.e. internal depreciation in relation to prices), or simply owing to the effects of the prolonged economic crisis. All these reasons combined explain why the efforts to lower the retiring age have made so little progress.

In *Austria* new age-limits have been fixed for the various categories of State teachers and also for notaries. In 1935 the Government of *New South Wales*, to mention an example from the Antipodes, lowered the age-limit of government officials to 60, involving the retirement of approximately 900 officials of 60 to 65 years of age. Four hundred to five hundred of the vacant places were to be filled by younger people, while the remaining places were to be abolished. In *Bulgaria*, too, the age-limit for public officials has recently been lowered to 60. In *Denmark* a Commission appointed by the Ministry of Finance has recommended that the age-limit be fixed at 70. The agitation for the lowering of the retiring age in *France* has so far not led to any tangible results. Article One of the above-cited proposal sponsored by M. Pomaret, which is now before the Chamber of Deputies, fixes the age-limit for most categories of state officials at 60, with the exception of those who are married and have at least three children. For them the age-limit would be 62. As the number of officials aged up to 70 and older is very substantial, the new provisions would only gradually come into force. The reform is to be completed by 1939. Following a proposal of the Bureau Universitaire de Statistique, Article Three of the same project goes even farther in suggesting that an age-limit of 65 should be introduced also for the liberal professions, i.e. lawyers, physicians, pharmacists, architects, engineers, &c. If voted, this regulation would however, only come into operation on January 1, 1939, in order to enable the professional organizations, in collaboration with the Ministry of Works and that of National Education, to work out adequate pension schemes, assuring those pensioned off of a care-free old age. As the project expressly states that the State is not to assume any financial burden in this connexion, it is difficult to see how the professions could possibly establish such schemes in the short space of three years. In the long run they might be perfectly

feasible, provided the members of the various professions, beginning with the first years of practice, were obliged to pay into a common retirement fund to be established under government auspices, in connexion with private insurance firms or vested in the professions themselves. In the United States and in Great Britain such schemes exist on varying scales. The legal enforcement of a general age-limit would greatly encourage such retirement funds.

But to continue our enumeration of measures contemplated or actually passed: early in 1935 *Italian* university professors saw their age-limit, hitherto 70 and 75, according to status, reduced by five years. The Sapru Commission supported fixing the retirement age at 55 for all state officials, teachers, &c.¹ As from July 1, 1935, the age-limit for higher officials in *Sweden* was fixed at 65 and that of the lower grades of officials at 60.

It is not to be expected that matters will remain where they are at present. There is no doubt that the lowering of the retiring age is one of the few immediately effective means under the present economic order outside the U.S.S.R. of providing work for the young unemployed, with or without university training. We are faced here with an issue which clearly transcends the narrow problem of unemployment in the professions. Young people, whatever their training may be, are clamouring for work and they demand with ever-growing insistence that the older generation give way to them. If they cannot find satisfaction through legislation they will take by force what they consider to be their due. Lawful evolution or revolution are the alternatives. It is significant that in a number of the totalitarian countries, and particularly in Germany, thousands of young men have been given employment, often of a highly responsible character, by removing older people ostensibly because they were not in full accord with the new rulers, in reality, however, because their places were needed for the young. The old were defeated in the battle of the generations.

Not enough heed is paid to the warning given by the German revolution. It would obviously be misleading to represent that revolution solely or even largely in terms of a conflict between the old and the young. Yet the struggle between the generations has played an important role in recent German history. It is at the bottom of a good deal of unrest in most other countries also. In so far as these countries have not lost all appreciation of the

¹ Sapru Report, loc. cit., p. 111.

blessings of peaceful evolution they will do well to listen to the voice of the younger generation, which asserts its right to work and demands it of those who for thirty-five or forty years have had every opportunity to follow their chosen careers. The young generation is not unreasonable. They are quite willing to co-operate with their elders in the solution of what they realize is a painful problem, as shown in one of the resolutions of the 1935 meetings of the seven international student organizations: 'Any measure aiming at a lowering of the retiring age must take into account the weak economic situation of professional workers, which obliges them to continue the practice of their profession beyond the normal retiring age.'¹ They appreciate the problem of the old; do the old measure the depth of despair of the young? In June 1935 the Nineteenth Session of the International Labour Conference rejected a proposal stating 'that, with a view to increasing the number of posts for young persons in administrative careers, the pensionable age of public officials should, where it was higher than 60 years, be reduced by degrees to that limit'.²

Protection of titles

The matter of titles required for exercising a profession has many facets. Titles can be considered, e.g., from the point of view of the social standing which goes with them, the protection they offer the public against unqualified practitioners, the aid they give for the maintenance of professional standards. Within the framework of this report we need to concern ourselves chiefly with the widespread movement for the protection of professional titles as a means of reserving certain professions for those who have received a university training for them. The movement, which is by no means new, has greatly gained in strength during recent years, and it was felt that the attainment of its ends would both help to improve the general economic situation in the protected professions and make available additional places for unemployed university graduates.

The movement takes two different forms, although they are often found together. The one tries to extend protection to hitherto unprotected titles and professions. The other endeavours to increase the requirements to be met by those who aspire to

¹ *Remedies for Unemployment among Professional Workers*, loc. cit., p. 320.
² *Ibid.*, p. 321.

protected titles. Before we enter, however, upon a discussion of these trends a few words are necessary on the mechanism of protection, which varies greatly from country to country and even within one and the same country.

In most of the countries on the European continent the protection of professional titles (particularly in the fields of law and medicine) has been achieved through legislation. The State lays down the requirements for obtaining professional titles with which goes the right to practise, and protects those admitted to the profession against the competition of unqualified people. The situation is simple, as in all these countries it is the State which controls also the institutions of higher learning. All that is needed is for the State to determine the course of studies and the examinations to be passed before the candidate can obtain a protected title. In countries like England or the United States, where there are often three different sets of authorities to control or influence professional curricula and the admission to professional work, the situation is very much more complicated. The three sets of authorities are, of course, the Government, the governing boards of universities, and the organized professions (practitioners' associations). Out of the interplay of those three interested groups a wide variety of ways and means for the protection of professional titles has come into existence. One arrangement is that the State confers upon the professional organization or a subsidiary of it the right to set its own requirements for admitting new members to practise, which obviously enables the professional organization to influence the professional courses in colleges and universities. Or special licensing boards are set up, composed of representatives of two or of all three groups. Under both arrangements the State usually, though not always, undertakes to protect the titles conferred by professional organizations or special licensing boards and punishes their usurpation by outsiders. At the same time there are numerous instances, chiefly in England, of professional organizations gaining a high measure of protection for their titles without any governmental help and without the assistance of the legislator. The success or failure of such attempts is determined by the standing of the professional organization in the eyes of the public, which in turn depends upon the integrity of its members and the requirements set for admission. To be put on the register of one of these organizations and to be entitled to call oneself a Fellow of

it—the famous capital letters at the end of the English names which are so confusing to the foreigner—does not confer the exclusive right to a particular type of professional work, but where the professional organization is in high regard it is likely to give the 'Fellow' a very decided advantage over a man who is not on the register.¹

In the light of all these complications it is very difficult to gauge how far the movement for the protection of titles has gained ground. That it has made substantial progress, at least as far as protection through legislation goes, is shown in a summary of information collected by the International Labour Office and reproduced in its *Review*.²

'The adoption of legislation for the protection of titles and diplomas has made rapid strides in the last few years. In *Austria* the titles of pharmacist and dental surgeon are now strictly protected. In *Belgium*, an Act of 1933 gives general protection to higher educational degrees and diplomas. In *Denmark*, a special Committee is studying legislation of this kind. Various *Estonian* laws of 1934 and 1935 have instituted professional chambers for several professions; these bodies will have extensive powers of control over all persons using the professional titles in question. In *France*, an Act for the protection of engineers' titles has been passed, and one dealing with architects' titles is now under consideration. A *German* Order of September 1934 lays down various conditions to be fulfilled before the title of architect can be claimed; only those with the right to this title may exercise the profession. In *Italy*, where the system of professional registers is in force for most of the professions, the Fascist Confederation of Professional Workers recommends further that the limits and scope of each profession should be clearly defined. This has now been done in one case by the Act concerning engineers and architects, which defines in great detail the exact powers and field of activity of the two professions in question.

'In the international field, mention should be made of the resolution adopted by the *International Confederation of Intellectual Workers at its Congress in 1934* with regard to the profession of architect—a profession in which the title is protected in many countries, whereas in others a

¹ For further details see the section on 'Professional Monopoly', in A. M. Carr-Saunders and P. A. Wilson, op. cit., pp. 352-65. For a short, penetrating analysis of the problem under consideration compare Alfred Z. Reed, *Learned Professions and their Organization*, in the Twenty-eighth Annual Report of the Carnegie Foundation for the Advancement of Teaching, New York, 1933, pp. 63-89.

² 'Unemployment among Professional Workers', loc. cit., pp. 314-15.

stubborn struggle to obtain protection is still proceeding. The resolution stressed the reasons of professional and public interest warranting the adoption of regulations on the subject of architects' titles, and urged the Advisory Committee on Professional Workers of the International Labour Office to decide in favour of such regulations.'

This list does not pretend to be complete. Since March 1936, when this summary was published, new proposals have reached the legislator. The Pomaret proposal in France, for instance, includes clauses regarding the protection of veterinary and dental surgeons. More important than this, professional organizations in a number of countries, and particularly in the Anglo-Saxon world, continue to grow. There is little doubt that their efforts to protect their members, with or without legal sanction, will be growingly successful as time goes on. Nor can it be doubted that this development benefits above all the university-trained man. He enjoys a growing measure of protection against the competition of quacks and unqualified people.

Turning to the second trend of which we have spoken above, and which is of particular relevance for our purposes, it is evident that the number of professions is growing for which a college or university training is considered essential. Professional titles are more and more defined in terms of college and university diplomas. The growing insistence on college training and attendance at a law school previous to admission to the Bar in the United States is a case in point. In more than one country large numbers of dentists or pharmacists, with nothing but a secondary education followed by apprenticeship, are gradually yielding their places to university-trained men or women, as State authorities or professional organizations raise the requirements for admission to these professions.

Most professional workers with university training and their organizations hail this development with much satisfaction. Yet a note of warning has to be sounded. It is, of course, altogether defensible and desirable to eliminate poorly trained people from the higher types of professional work. The danger, however, is unmistakable that professional organizations dominated by college and university graduates may go too far in their zeal, and attempt to reserve to themselves certain types of work which can perfectly well be accomplished by professional workers without a higher education. The danger is particularly marked in professions

where the dividing line between intellectual and manual work is very fluid—certain types of dental or engineering work, for instance. To require college and university degrees for such occupations is not likely to lead to a permanent improvement of the conditions for university graduates. It is much more likely to force a yet larger number of young people into the universities, thus adding to their overcrowding, with all the deplorable consequences which have been described in earlier chapters.

VIII

INFLUENCING THE MARKET FOR INTELLECTUAL LABOUR (*cont.*)

III. DISTRIBUTIVE MEASURES

ONE school of economic thought has maintained that the present-day crisis is primarily due to a maldistribution of available goods. Without sharing the view of those who are only happy when they can attribute any phenomenon to one particular cause, ample proof has been given in this report that some of the difficulties are due to a maldistribution of intellectual workers. This maldistribution finds expression either in the overcrowding of certain professions while others are suffering from a lack of new candidates, or in the fact that members of one and the same profession are crowded together in certain places, preferably urban agglomerations, while other places are not adequately provided with professional services. The best way of meeting these forms of maldistribution lies in the establishment of more fully developed systems of educational and professional guidance, and of employment agencies for professional workers. To them the next two sections are to be devoted. Further sections will be added, dealing with the creation of new demands and with a series of supplementary measures likely to bring about a better distribution of intellectual workers between land and city, between the congested areas of the western world and the 'new' countries overseas as well as the colonies.

Educational and professional guidance

The desire to establish systems of educational and professional guidance, and to extend them where they exist, seems to be general amongst the groups and organizations which have given any thought to the problem of unemployment in the professions. The International Labour Office, which in 1931 consulted the professional workers' organizations on this point, reports 'that the replies almost unanimously pronounce in favour of vocational guidance'.¹ The Conference of Experts on Overcrowding in the Universities, convened by International Student Service in

¹ *Recruiting and Placing of Professional Workers*, loc. cit., p. 14.

September 1933, also stressed the importance of well-developed systems of vocational guidance. The International Confederation of Professional Workers at its London Congress in 1934 emphasized the urgent need for the creation of vocational guidance offices. The Sapiro Report devotes a chapter¹ to this issue and suggests that one or two psychotechnical experts from England should be invited to the United Provinces (provided no experts could be found in India), with a view to developing vocational guidance on psychotechnical lines in that part of the world. The two Swedish experts, Wicksell and Jerneman, put the demand for the creation of a National Professional Orientation Committee at the centre of their recommendations.²

Good advice is thus not lacking. Unfortunately the reality falls far short of the wishes expressed. The report of the International Labour Office which was cited in the previous paragraph comes to the conclusion 'that vocational guidance for candidates for the professions is at the moment practically non-existent. Except in a few countries (Austria, France, Germany, Switzerland, the U.S.A., and, to a certain extent, Hungary) children and young people who are attracted by the professions have nowhere to apply for advice on the subject.' 'No doubt,' so the report continues, 'there are countries which have developed vocational guidance but have not provided the competent offices with more than a very poor equipment for dealing with professional workers; other countries have no institutions at all.'³ The picture drawn by this report is somewhat too black. The number of vocational guidance offices, of psychotechnical institutes specializing in educational and vocational guidance, and of similar agencies is greater than is apparently assumed by the report. The National Institute of Industrial Psychology in England, the Nederlandsche Stichting voor Psychotechniek in Utrecht, or the Psychotechnical Laboratory of the University of Belgrade—to mention only a few examples—have all attempted to serve prospective professional workers. The real difficulty resides not so much in the fact that agencies for vocational guidance are lacking—though that lack is obvious enough—as that even the existing agencies, almost without exception, and the methods at their disposal are so ineffective as to render practically impossible the discharge of their task.

¹ Loc. cit., pp. 179–81.

² Wicksell Report, loc. cit., pp. 382 ff.

³ Loc. cit., p. 13.

(a) *The requirements for effective guidance.*

Effective and socially useful vocational guidance depends on (1) the possibility of testing individual aptitudes and attitudes; (2) a thorough understanding of the nature and requirements of the various careers towards which candidates may be directed; (3) a knowledge of the probable relation between supply and demand in the various vocations or professions at the time the candidates will be ready for work.

The aptitudes required in those who are preparing themselves for professional careers in the various institutions of higher learning are many and varied. They are expected to possess general intelligence—a term which has given rise to heated controversies amongst the experts as to what it means—imagination, a good memory, not to speak of the various traits of character and temperament desirable in the higher types of intellectual worker. Apart from these general characteristics each type of professional work requires certain specific aptitudes, such as a gift for teaching, or manual dexterity for the surgeon and dentist. Ever since Juan Huarte in 1575 published his *Examen de ingenios para las ciencias*, psychologists have tabulated and re-tabulated these various aptitudes.¹ From tabulating them it is, however, a far cry to the discovery of the appropriate means for testing them. While the enthusiasm for mechanical tests for discovering everything worth knowing about the human individual may still linger here and there, particularly in the United States, most of the outstanding psychologists agree that not only tests but all the other means employed to discover individual aptitudes are still very inadequate. A further difficulty is our insufficient knowledge of the educability of individual aptitudes. No doubt human knowledge in these fields is progressing rapidly, but it certainly cannot yet offer the requisite tools for testing the existing or potential aptitudes not only of a few individuals but of the large mass of people who want to devote themselves to higher studies with a view to entering the learned professions.

The Limburg Commission in Holland consulted a number of experts on the subject, whose opinions are recorded in the

¹ For an historical and systematic exposition of this subject we refer the reader to the recent publication by Léon Walther, *Orientation professionnelle et carrières libérales*, Neuchâtel and Paris, 1936. Walther gives a valuable bibliography of recent publications.

Limburg Report. The memorandum submitted by Professor Ph. Kohnstamm¹ deserves particular attention. After discussing the shortcomings of present methods it points out the necessity of supplementing tests by prolonged periods of observation, the observers to be chosen amongst the teachers who are in close contact with the pupils. Kohnstamm goes farther, demanding that the curricula of secondary schools should be revised and the emphasis put on the development of the thought-processes of the pupils rather than on their ability to reproduce memorized knowledge.² Such a change, apart from all other advantages, would obviously make it easier for the observers to discover the aptitudes of their pupils. Yet even in this case it would only be possible to determine the degree of general, or in Kohnstamm's terms 'theoretical', intelligence required for higher studies. The observers would be able to say very little about the pupil's aptitude for a particular profession. In other words modern psychology and pedagogy may offer refined methods of selection for higher studies—a point which was mentioned when we discussed the problem of examinations—but are on the whole not yet in a position to offer 'fool-proof' methods for determining professional aptitudes. Educational guidance is making great strides, professional guidance is still very much in its infancy.

The second requirement for successful professional guidance is a thorough understanding of the nature of the various professions. In view of the multiplicity of possible intellectual careers³ the task is formidable but not impossible. A great affinity exists between many of these careers; it is thus possible to group together those which require more or less the same aptitudes. The number of these groups is comparatively small, and classifications and monographs on individual careers or groups of careers are not lacking. Much headway has been made in this direction in Germany, where a special branch of knowledge, *Berufskunde*⁴ ('Vocational Science'), has been developed.

¹ *Op. cit.*, pp. 605-10.

² A more detailed discussion of this and related subjects is to be found in I. L. Kandel, *The Dilemma of Democracy*, *loc. cit.*, *passim*; also in his *Examinations and their Substitutes in the United States*, *loc. cit.*, particularly pp. 143 ff.

³ The *Handbuch der akademischen Berufe*, edited by the Sächsische Akademische Auskunftsammt für Studien- und Berufsfragen (Leipzig, 1927), enumerates 706 careers requiring a higher education.

⁴ For further details see Léon Walther, *op. cit.*, pp. 15-53.

In the light of all that has been said in earlier pages of this report little need be added about the difficulty of meeting the third task of professional guidance—the prediction of future professional prospects. We know that the crisis in the professions has led to sustained efforts in many parts of the world to get a better idea of the present and future relation between demand and supply in the market of intellectual labour. The Limburg Report for Holland, the Wicksell Report in Sweden, the Sapru Report in India, the publication of the *Volkswirtschaftliche Zentralstelle* in Kiel have greatly advanced our knowledge not only of the actual situation but of methods of arriving at forecasts which will be more than wild guesses. We know that, theoretically speaking, it is possible to determine sufficiently far in advance the probable demand for professional workers needed to replace those who have died or retired. It is furthermore possible to evaluate roughly additional demands likely to result from improved economic conditions and new needs for professional services. Yet no one will maintain that the achievements of the last few years are in any sense final. They serve above all as an encouragement to further efforts in the same direction. University statistics need improvement, adequate professional statistics are still lacking even in countries like Holland or Sweden. Most important of all, most of the findings of 1935 and 1936 will be hopelessly out of date a few years hence.

(b) *The organization of professional guidance.*

Any one who realizes how inadequate are the tools now at the disposal of the vocational counsellor and the difficulties of perfecting them will know how terribly handicapped vocational guidance agencies are at present. They do what they can. Most self-respecting high schools in the United States offer their students some form of vocational guidance. The emphasis generally lies on the discovery of individual aptitudes, supplemented by a few 'career talks', largely dealing with the qualities and attitudes necessary for the various careers. As a means of achieving a better distribution over the various occupations, both manual and intellectual, these efforts are of little avail. Those who are expected to give advice do not possess the relevant data regarding present and future prospects on the labour market. They cannot therefore direct young people to careers where they are most needed or dissuade them from entering on a long preparation for a profession

which holds out no prospects for employment. The Offices for Guidance in Academic Careers (*akademische Berufsberatungsämter*), which were set up in German universities after the War, laid more emphasis on actual professional prospects. Their usefulness was, however, limited by the fact that most of those who consulted them had already made up their minds to study and would, therefore, not let themselves be guided into non-academic careers, in spite of the fact that practically all learned professions were overcrowded.¹ The same holds true for the Information Office on Advanced Studies and the Professions, which was established in 1927 by the Hungarian Ministry of Public Instruction.

In a different category are the efforts undertaken by the organizations of professional workers to spread information concerning the professions among those who are interested in them. The repeatedly cited report of the International Labour Office on its inquiry amongst professional organizations on *Recruiting and Placing of Professional Workers* gives a large list of such efforts, on which we shall not attempt to improve:

'The German doctors' organization collaborates with the vocational guidance offices by providing them with full information on the characteristics of the medical profession and the position of doctors; it also helps medical students in the same way during their first few terms. In France, the Federation of Medical Associations carried on a propaganda campaign in 1931; it gave up the idea of using the vocational guidance offices, to which candidates for the professions very seldom apply, and decided to go direct to young persons and their parents. A circular was sent in 10,000 copies to school and college teachers and to parents' associations, and was published in the scholastic press; it warned would-be candidates against the difficulties encountered in the medical profession. In Great Britain, the Medical Association issued a special number of its journal and gave it the widest publicity. In Australia, the pharmacists' association carries on a regular campaign in the press and is ready to supply interested persons with all the information they require. The same applies to the Swiss pharmacists, who organize lectures, publish notices in the newspapers and are in communication with the secondary schools. The French Federation of Engineers' Unions has published several pamphlets on conditions in that profession.

'The school authorities and the teachers themselves also often help

¹ Reference has been made before to the Arbeitsgemeinschaft für akademische Studien- und Berufsberatung in Berlin and its publication *Studium und Beruf*, which is invaluable for all those who want information about the situation of the professions in Germany and the educational requirements leading up to them.

in the work of propaganda. In Yugoslavia, for instance, the association of secondary school teachers is actively engaged in vocational guidance; in 1924 it published a "Guide to the Choice of an Occupation". Its members give talks on the subject in school hours and in public, and frequently make use of the press; one of them published a book on the professions in 1932. The Association is doing all it can on these lines to develop vocational guidance, of which it has great hopes.

'Government services sometimes supplement the work of those within the occupation. The U.S. Department of the Interior, for instance, has started a series of monographs on various professions; and the American pharmacists' organization, in its reply to the questionnaire, emphasized the great value of the pamphlet on their profession which it had widely distributed.

'But in the opinion of most of the organizations consulted the work done so far in this sphere is quite insufficient. . . .'

There can be no doubt that many of the professional organizations have rendered a very real service to the cause of professional orientation, particularly by furthering our knowledge of the nature and requirements of the various professions. It is less certain whether their warnings and campaigns to deter young people from entering a given career have always been disinterested and warranted by a real overcrowding of the profession. For an organization set up to protect the interests of its existing members the temptation is great to paint a black picture of future prospects in order to avoid increased competition.

(c) *A proposal from Sweden.*

Instead of devoting any further space to a description of past efforts with all their imperfections, we hope to serve a more useful purpose by tracing in broad outline the measures which might give professional guidance its rightful place in establishing a more satisfactory balance of supply and demand in the professions. In this connexion the proposals of the Swedish experts, laid down in the Wicksell Report, are of outstanding merit.¹ The National Professional Orientation Committee which they suggest should be created would be a permanent institution under state auspices, composed of permanent and *ad hoc* members. Amongst the permanent members would be representatives of the chief learned professions, university teachers, a representative of the National Union of Students, and the Chairman of the Committee super-

¹ *Op. cit.*, pp. 382 ff.

vising the work of the Employment Exchanges for Intellectual Workers in Stockholm. *Ad hoc* members would be invited to serve whenever the Orientation Committee felt in need of detailed information about a particular profession. The tasks of the Committee would be twofold: (1) to observe continuously the situation on the market for intellectual labour; special inquiries to be made from time to time into changes within individual professions; (2) to publish its findings at regular intervals and to bring them to the notice of schools, parents, and students. The widest possible publicity would be given to the work of the Committee. Circulars would be sent all over the country, the press and the radio be used extensively. Discussion on professional prospects and the choice of a profession would be organized at least once a year in every secondary school. In addition vast improvements of the existing university statistics are proposed, which would be effected either by the office of the Orientation Committee or by the competent government offices. A register of all students would be established which would be kept up to date even after the students had left the universities, so as to obtain further information about the situation in the professions.¹

The advantages of this plan are obvious. The Committee as a government institution and by its composition would be altogether impartial. It would be removed from the influence of professional organizations and their one-sided interests. Being permanent, it could give a running commentary on the labour market and warn parents and students whenever a profession threatened to become overcrowded. As part of a large scheme to provide information on *all* professions these warnings would probably have more positive results and be less dangerous than the sporadic warnings of professional organizations. They would be more positive because they would not only indicate what the student ought not to do but show what he might do. They would be less dangerous, because sporadic warnings may lead to 'landslides' in student enrolments likely to upset the professional prospect in more than one profession by a sudden increase of enrolments in professional courses against which no warning has been issued. A regular information service would counteract this. Finally the Committee, being national by definition, would be in a position to watch professional

¹ A central register of this kind was recently successfully established within the Department of Educational Statistics at The Hague by Dr. Ph. Idenburg.

opportunities throughout the country, which in view of the greater ease with which professional workers move from one place to another is of the utmost importance.

The Swedish proposal leaves aside two issues: (1) the question of individual aptitudes, and (2) the problem of diverting into non-academic careers those who are poorly qualified for higher studies. On the first point it leaves it altogether to the individual or his parents to choose a career, in the light of the information provided by the Orientation Committee. On the second point the report contents itself with proposing a reorganization of secondary education on more directly vocational lines—an important issue to which we shall have to come back.

As long as the methods of testing individual aptitudes are as problematical as they are at present, there is much to be said for neglecting the question of individual aptitudes. Yet young people and their parents are often anxious to avail themselves of expert advice, which can best be given through vocational guidance agencies in the schools. If such agencies are given the opportunity of observing pupils regularly and over a long period they can render valuable help even in the present state of psychological and characterological knowledge.¹ They can do more—they can meet also our second point, provided they are given the relevant data not only about prospects in the professions but on the labour market in general. If the counsellors know the needs in the various manual and semi-intellectual occupations which lie somewhere between unskilled labour and the higher forms of professional service, they will become very important agents in social planning.

¹ Cf. Edward C. Thorndike, *Prediction of Vocational Success*, The Commonwealth Fund, New York, 1934. The purpose of this report is 'to tell what we [i.e. Professor Thorndike and his collaborators, *Ed.*] have discovered by following for ten years a large group of children who were carefully studied in 1922' (Foreword). The conclusions reached are, from the point of view of our own study, on the whole encouraging: 'If an occupation is open only to graduates of higher institutions of learning, such as colleges or professional schools, it may be predicted with very high probability that certain pupils cannot succeed in that occupation, for the very good reason that they cannot even enter it. The vocational counsellor may safely assume that a pupil whose expected grade status at age 22.5 (schooling being continuous from the time of the test on) is below grade 14 (college sophomore or second-year student in a professional school entered after high-school graduation), can never graduate from a reputable college, law school, medical school, theological school, professional school for teachers, collegiate school of business or journalism, engineering school or the like. The same holds substantially for expectation below grade 13 at age 21.5. or below grade 12 at age 20.0' (p. 113).

Their advice will not simply run: 'You ought not to go to a university'; it will direct young people into those channels that lead to employment and a satisfactory way of life. It seems to us, therefore, that the Orientation Committee, as a central agency, should not confine itself to observation of the market for intellectual work, but should extend its scope to making known the occupational prospects in all walks of life. The fact that the Swedish experts obviously desired to make proposals which could easily be put into operation may explain the restrictions of their plan. In the long run, however, an extension of their scheme can hardly be avoided. Vocational guidance and orientation, in order to reach the maximum of usefulness, must attempt not only to achieve better distribution of professional workers throughout the learned professions, it must not only deter people from starting professional courses, but it must point the way to those types of work, manual or otherwise, which society needs and for which it is prepared to pay.¹

Employment offices and occupational adjustment

There is much affinity between agencies for professional guidance and employment exchanges. They both serve a better distribution of available workers over the various careers and occupations: the one by directing prospective workers towards careers which hold out promise for work and the other by helping them to secure such work. At times the two functions are combined in the same office.

The real or potential importance of employment offices is becoming increasingly evident. With the growing complexity of modern life and the widening out of economic frontiers it has become impossible for the individual to discover for himself whatever occupational opportunities may offer themselves in a territory stretching over thousands of miles. Those in search of work may be living in congested areas where they are condemned to longer or shorter periods of unemployment, and yet be unaware of opportunities elsewhere where their services are needed. In the case of professional workers the usefulness of employment offices has been further enhanced by the fact that the proportion of salaried positions for professionally trained people is very much on the increase, while the number of opportunities for independent practitioners

¹ The wider implications of 'occupational planning' as here envisaged will be discussed in Chapter X.

is on the decrease. In the matter of placing, the professional worker is thus becoming assimilated to the large masses of manual workers and employees for whom employment offices were first instituted. This is not to imply, however, that employment agencies may not be eminently helpful also to those who hope to establish themselves in independent practice.

(a) *Five ways of organized placing.*

The numbers of attempts to organize the placing of professional workers bear witness to a real need. They can be grouped under five headings.¹ There are first of all private agencies run for profit. These are without any doubt the least desirable form of organized placing. Where they have obtained a monopoly, as for instance in the theatrical world, they are apt not only to extort exorbitant fees from those whom they place but they are open to charges of favouritism if not open corruption. The protests of the professional workers themselves and the establishment of more satisfactory agencies are leading to their gradual abolition.

More frequent and very much more satisfactory are the attempts to organize placing through the professional organizations. They vary widely in form, from the simple insertion of a 'Situation vacant and required' column in the professional journal to the placing service, complete with card indexes, files, and a specialized staff. The work may be organized unilaterally, i.e. carried on by a group of professional workers whose task it is to obtain from employers information concerning posts and to find appropriate workers from among their own unemployed; or it may be bilateral and carried on or supervised by a mixed body of employers and employees acting in agreement and adjusting supply to demand in the profession. Unfortunately, many of these attempts at organized placing have remained ineffective. Professional workers often seem to be congenitally unable to organize themselves, and sound schemes conceived by a minority have petered out owing to the indifference of the majority. Worse than this, many professional workers who believe in professional organization have yet been reluctant to seek work even through their own agencies. They are afraid of becoming stigmatized as people of inferior worth, unable

¹ For a more detailed exposition see *Recruiting and Placing of Professional Workers*, loc. cit., pp. 30-43. The factual information reproduced in the following paragraphs is in part based on this report.

to make their way without outside help. Their professional instincts are in conflict with professional solidarity. This conflict leaves it indeed to the weaker members of the profession to apply for work through an agency. The vicious circle is completed by the employer's then preferring to fill whatever vacancy he has to offer without resorting to the agency.¹ A particular weakness of the placing agencies organized by professional associations is that by definition they concentrate on a very narrow sector of the labour market. They are insufficiently acquainted with the situation in allied professions, and therefore in times of stress, when their own profession offers no opportunities, often not in a position to direct applicants to vacancies outside the narrow professional limits.

A third type of placing is through associations of former students. These attempts are in some places very effective. The 'Association des Anciens Élèves de l'École Normale Supérieure' in Paris, the Association of Alumni of the Commercial College in Stockholm, various alumni associations in the United States and elsewhere are placing every year a substantial number of graduates from their respective schools. Their procedures may be haphazard—depending on the positions and degree of influence attained by former graduates—but institutional pride and personal attachment enable them to achieve what better-organized agencies fail to accomplish. A better distribution of intellectual workers will not result from them, for no attempt is made in that direction.

The fourth type of organized placing—through university employment bureaux and appointments boards and committees—deserves special attention. It avoids some of the defects of other systems and offers many advantages. Appointments boards owe their existence to the practical sense of the Anglo-Saxon race. While most of the universities on the European continent held aloof from such sordid business as jobs and careers, the Anglo-Saxon universities, and chief amongst them Oxford and Cambridge, recognized at an early date their responsibility towards the future of their students. The origins of the Oxford University Appointments Committee go back to the year 1899. Other universities followed, and to-day there is hardly a university in England and

¹ Sociologically it is interesting to note that these difficulties can be overcome where employers and professional workers have a bond which transcends purely professional interests. The Roman Catholic Welfare Conference in Washington, e.g., through its educational department, has done most effective work in providing Roman Catholic institutions with Catholic teachers.

few amongst the larger institutions in the United States which have not made some arrangements to facilitate the placing of their students after graduation. The offices created for that purpose are in close contact with the university authorities, the staff, and the general public, particularly the business world, which is often represented on their councils. Being close to the university or within its precincts the officers of the boards or committees are able to guide students while they are still studying and to obtain valuable information about their aptitudes, with the result that they can do much to place the right person in the right position. In their earlier days they had to fight against the same prejudice as hampers the efforts of most of the professional organizations, viz. the assumption on the part of both graduates and employers that they were only serving the 'left-overs'. While that suspicion may still linger in some minds, it has lost most of its force during recent years owing to the increased difficulty of finding work, which has forced more graduates than ever before to seek help in securing employment. As the offices cater for every type of student and every type of career they are not in the same danger as the agencies maintained by professional organizations; they are able to direct graduates when necessary into channels which may not altogether accord with their specialized training.

There are other, though perhaps not so obvious, advantages. The councils of these employment bureaux and their annual reports offer a unique opportunity to discuss the advantages and disadvantages of educational methods and curricula in their bearing upon the future careers of students. While it is difficult to adduce concrete proof, it is nevertheless certain that these discussions, based on practical experience and not on theory, have done much to influence educational practice. In the light of our remarks in a previous chapter on the dangers of cheap vocational courses we shall not be accused of rank heresy if we consider such developments to be good for both the institutions of learning and their students. Finally, the appointments boards have done much to bring home to the public the value of higher education on the part of its servants, whether in private or state employment. It is not claiming too much to say that the appointments boards in England and elsewhere are gradually conquering the business world. The efforts of such men as Mr. H. J. Crawford, of the Appointments Board of the University of London, to draw the

attention of business men to the advantages of employing university graduates have met with marked success. The number of graduates placed in business and industry increases every year (in Oxford from 39 in 1926 to 101 in 1934).¹ We are, of course, not blind to the dangers of this development, which might lead to a fetishism of diplomas and thus swell still further the number of university students. The danger-point has, however, certainly not been reached in England, and business is likely to benefit by the larger number of graduates amongst its employees. Besides, this propaganda benefits above all not those who are following strictly professional courses, where overcrowding may become very undesirable, but the rank and file of college students seeking a liberal education.

¹ As is to be expected the methods used in England to interest business executives in university graduates—direct appeals, magazine articles, letters to the press—are very sober. In Ireland, on the other hand, the methods are at times more colourful. The Graduates Committee of the National University of Ireland in 1935 sent out a calendar with slogans for each month. With the permission of Mr. J. C. Flood, Secretary of the National University Appointments Committee, we reproduce them as a curiosity.

January: Be progressive in the new year—Employ National University Graduates—Prosperity depends upon ability.

February: Modern industrialists prefer to employ Graduates—The best brains are not too good for business—Employ only the best!

March: Wise business men send their sons to the University because they realize the value of trained minds—Employ National University Graduates!

April: Don't complain about bad times—Employ Graduates of the National University—Irish Business needs Irish talents!

May: Employ a Graduate firm of accountants to plan or organize your business—Appoint a Graduate Architect to plan your home or business premises.

June: Modern industrial conditions demand adaptability and a high degree of specialization—National University Graduates are trained with this in view.

July: If a new problem arises in business he who remembers but does not understand fails—The Graduate who understands, adapts himself and succeeds.

August: Do it now—Employ a Graduate in your office and factory—Adaptability is the keynote of university training.

September: The most efficient man in business is one who unites to a sound education a high degree of specialization—Graduates of the National Universities fulfil these requirements.

October: That job you have vacant . . . ? Why not get a Graduate this time, and note the improvement in general efficiency.

November: There are many new Graduates available this month, all of them competent. We are in touch with one to suit you.

December: If you took our advice in January, you will now agree that it was good advice—If you did not then profit by the experience of your competitors and employ Graduates in 1936.

The disadvantages of the existing academic offices for placing their graduates must, however, not be overlooked. Except in the case of institutions of national and international reputation the radius of their activities is restricted. They serve only a limited area and are informed only about the opportunities in that area. As there is often but little co-operation and co-ordination between them there is a good deal of overlapping and even competition. At times opportunities are lost because an office is not in a position to fill a vacancy and yet does not communicate it to other offices. Finally, their work is on the whole confined to recent graduates. Older graduates who lose their positions have to go elsewhere.

Of the major forms of organized placing there remains but one type to mention: that done by public exchanges. In some countries these exchanges have special services for professional workers; in others the work is done through the general labour exchanges. It would lead too far to enter on a detailed discussion of their organization and methods of work, which vary from country to country. In some countries professional organizations have a large share in the administration and running of the public exchanges, on whose boards and committees they are represented—a form of collaboration which most professional organizations deem highly desirable. In other countries their influence is negligible. In most countries the placing of professional workers through public exchanges has made great strides in recent years. The article on 'Remedies for Unemployment among Professional Workers', in the *International Labour Review*,¹ lists some of the countries of which this is true: Austria, Bulgaria, China, Czechoslovakia, France, Germany, Hungary, Italy, Japan, Switzerland, U.S.A., &c.

Japan has the most comprehensive system of public exchanges for professional workers. Special sections for professional workers with higher education were set up within the public employment exchanges in the twelve largest cities as early as 1926. A special exchange was reserved for them in Tokyo. Sufficient time has elapsed to judge of the results obtained. According to the findings of a sub-committee of the Central Employment Commission of the Government their tasks were laid down as follows:

'... in addition to co-ordinating their own activities and those of other employment exchanges, they should regulate the demand and supply of intellectual workers on a national scale, and endeavour to find

¹ Loc. cit., pp. 316-18.

employment for such workers even in foreign countries. They should secure particulars concerning the personal status, character, ability, and experience of each applicant, and circulate these particulars among prospective employers. They should also explore new fields of suitable occupations for intellectual workers and the possibilities of their employment.¹

The same findings demanded that the Government and municipal authorities should engage all their employees through employment exchanges, not excluding even the higher officials. A Permanent Employment Commission for Intellectual Workers was furthermore to be established, composed of representatives of the Chamber of Commerce, various commercial and industrial organizations, the Government and municipal authorities, intellectual workers and their employers generally. It is evident that the scheme was well conceived and thorough. Yet the results did not come up to expectation, as was stated without ambiguity by M. S. Yoshisaka, Chief of the Permanent Japanese Delegation to the International Labour Office, in his reply to an inquiry of the Institute of Intellectual Co-operation in Paris, which reply was graciously put at our disposal by the Institute. The weakness of the scheme, according to M. Yoshisaka, is that the employment exchanges are too far removed from the schools and universities. They are not in a position to judge the individual capacity and aptitudes of those in search of work, a failing which has grave consequences where the placing of intellectual workers is concerned. M. Yoshisaka suggests, therefore, that 'more placing of intellectual workers can perhaps be effected by the school or university'.

We do not know whether the authors of the Wicksell Report in Sweden were aware of the Japanese experience. It is not likely, for curiously enough they make a proposal² for the establishment of special sections for intellectual workers within the public employment exchanges which is practically identical with the Japanese scheme which has had such mediocre results. There is to be the same relation to the general public labour exchanges, the same emphasis on a central committee composed on the same lines as the Employment Commission for Intellectual Workers in Japan, the same insistence that State and municipal authorities should turn primarily to the labour exchanges for their employees and

¹ Kensei Yamada, 'Unemployment of Intellectual Workers in Japan', in *Vox Studentium*, Geneva, vol. 14, no. 6, Apr. 1927.

² *Op cit.*, pp. 394-401.

officials. If the Swedish scheme goes through, one cannot help wondering whether the same shortcomings will become obvious which are being recognized in Japan. On the other hand, it is of course perfectly possible that a scheme which has not proved fully satisfactory in Japan, with its large numbers of universities and of graduates, may be more successful in Sweden, where there are only a few universities graduating a comparatively small number of students each year. This particular situation will undoubtedly render it very much easier for independent employment exchanges for intellectual workers to maintain a close contact with the institutions of higher learning. A central register of all the graduates, kept up to date even after the students have left the universities (see p. 254), might further facilitate their task.

On the whole, however, and by way of conclusion, there is much to be said for relating the organized placing of intellectual workers with a higher education as closely as possible to the institutions of higher learning. Existing university appointments boards may be inadequate, but they have the advantage of being in a good position to observe the aptitudes of at least the younger group of professional workers. It must not be forgotten that in the learned professions most of the unemployed are in that group. Graduates who have been employed for some time lose their positions, except in times of acute crisis, very much less frequently than manual workers and those in the intermediate occupations. Besides, there is no reason why former students, if out of work, should not return to the employment agency at their university or turn to the nearest agency of the kind.

The question of how to organize under such a scheme the placing of intellectual workers without higher education is more difficult, but probably not insoluble. To ask the university appointments boards to take care of them is obviously not advisable. They are not competent to deal with this group and would only lose their highly specialized and, for that reason, effective character if they extended their activity in this direction. Without being dogmatic it can be maintained that this intermediate group should be referred to the public labour exchanges, and that special departments should be created for them within these exchanges. It is well known that even to-day this group registers more frequently with public labour exchanges than any other professional group and draws greater benefits from them.

As the dividing line between the intermediate groups of professional workers and the university graduates is fluid, particularly when it comes to the securing of jobs, provision would have to be made for some co-ordinating organ, a central committee, to advise and supervise both the university appointments boards and the sections for professional workers within the public labour exchanges. It would also have to see that the university appointments boards achieved close co-ordination of their activities on a national basis. There is no reason why these tasks of co-ordination should not be assumed by the same central body which it was suggested in the previous section (see pp. 253-4) should be responsible for the national organization of professional guidance. Thus the National Professional Orientation Committee proposed by the Swedish experts might—if suitably enlarged and endowed with sufficient authority and a competent bureau—be turned into a National Committee for Professional Orientation and Placing. The similarity of the tasks of professional orientation and of placing would warrant such a step, designed to avoid multiplying central organizations.

It would be tempting to spin out this idea still further, but no useful purpose would be served. An international report must confine itself to giving information which may be useful for purposes of comparison, and to discussing problems and principles in broad outline. Organizational details must be worked out by each country separately in order to meet specific situations. A scheme such as the one outlined above might and probably would be workable in a country in which the universities are state institutions. It would need, however, a great many adaptations, which obviously cannot be discussed here, to meet the peculiarities and needs of a country like the United States with its multitude of diverse educational institutions, which are for the most part not directly responsible to the State. It should not be impossible to make such adaptations, particularly in the Anglo-Saxon countries, where university appointments boards are already well developed and enjoy the confidence of the graduates and their employers alike. Nor should it be impossible in these countries to devise a central organization flexible enough to allow for the combined operation and the development of employment agencies set up for their members by well-established professional organizations.

(b) *Adjustment and re-training.*

One further activity needs mentioning which supplements the efforts for organized placing of professional workers. When the overcrowding of a profession obliges unemployed members of it to look elsewhere, either in a less crowded branch of activity or even in a less crowded section of their own profession, a period of re-training and occupational adjustment is at times necessary. As a matter of fact, the rapid technical development of the modern world, which often makes acquired techniques obsolete and forces people to change their occupations late in life, makes it necessary to envisage the establishment of re-training and adjustment centres even where there is no overcrowding. The National Occupational Conference¹ in the United States has done much to demonstrate the need for such centres, to analyse their relation to vocational guidance and employment agencies. Various agencies of the Roosevelt Administration have organized re-training courses open to professional workers. Their work is supplemented by a number of private agencies such as the 'Adjustment Service' in New York, run by Mr. L. S. Hawkins during the years 1933-4, and reopened, because it responded to a genuine need, in 1935. The functions of the Adjustment Service are primarily advisory: it directs unemployed professional workers, after having studied their aptitudes, into less crowded occupations and advises them as to the necessary re-training. Re-training institutes, either in close contact with the labour exchanges and organized by them, or evolved as independent organizations, exist also in such countries as Germany, France, Great Britain, Poland, and Switzerland. While all these institutions are rendering signal service to some groups of professional workers, the fact cannot be overlooked that their usefulness for intellectual workers with a full university training is limited. If the French authorities, e.g., in co-operation with the Bureau Universitaire de Statistique, establish Centres de Formation Technique to teach unemployed workers highly specialized techniques of the metallurgical industries, they certainly meet a need keenly felt by those industries. They also offer a splendid opportunity to various types of workers to improve their position. But to suggest a process of re-training in these centres to university

¹ The National Occupational Conference, a Carnegie interest, publishes a magazine, *Occupations*, which is a treasure-house of timely information.

graduates who have spent years, not simply improving their general education but preparing themselves for a definite intellectual career, is obviously a counsel of despair. At some future date society may reach the point when most people will be able to obtain a higher education, and be satisfied with earning their living in a factory. As it is, re-orientation and re-training for professional workers with higher education nearly always means a loss of standing, an involuntary abandonment of professional interests and aspirations, and therefore dissatisfaction and unrest on the part of those who have to submit to it. The Bureau Universitaire de Statistique incidentally has recognized this difficulty, and is making every effort to recruit the students for the Centres de Formation Technique amongst the pupils of secondary schools rather than amongst university graduates. It attempts thus to relieve the pressure upon the universities. As a general rule the more highly trained a man is the less desirable does re-training become. It may be a boon to unemployed high-school or even college students, it becomes a catastrophe for fully-trained physicians or lawyers.

Stimulating and satisfying new demands

Employment agencies are primarily concerned with the effective demand which at any time may exist on the market for intellectual labour, i.e. the demand which results from keenly felt and clearly recognized needs for professional services which the consumer can afford to meet. In addition there exists, however, in all countries a further demand which from the point of view of future prospects for intellectual workers deserves every attention. It presents itself under two different forms, which for the sake of simplicity we shall call the potential and extra-marginal demand. We speak of a potential demand where the need for professional services is not clearly recognized in spite of the fact that it would be in the interest of the employers—public authorities, private enterprises, and the general public—to avail themselves of professional services and that they would be able to pay for them. The indifference of State and municipal authorities in some countries to the possibility of employing a larger number of graduates in their administrations may be cited as an example. We speak of an extra-marginal demand where the needs for additional professional services are felt, but where the consumers owing to economic

reasons find it impossible to satisfy them. The marginal price they would have to pay for these services is beyond their means.

(a) *Potential demands.*

The difficulties encountered by professional workers during the depression have led to numerous efforts to discover potential demands and to exploit them, i.e. to render them effective. A few examples will indicate their scope.

Mention has been made of the way in which the English graduate is gradually conquering new positions in the field of business and commerce. There is every reason to think that with the growing complexity of economic life this trend, noticeable also in other countries, will persist.

Associations of architects, particularly in the United States, are endeavouring to gain a firmer foothold in the building trade. They are likely to obtain a measure of success, as there is much ground to conquer. It is estimated that 80 per cent. of the single-family houses in America are erected without the collaboration of an architect, simply with the help of rough plans provided by builders. In the rural districts even 95 per cent. of the single-family houses which grace the American country-side have been constructed without architectural advice.¹ It is certainly not in the interests of the country—not even of those districts which do not suffer from hurricanes—that there should be 385 and 354 architects per million of population in the States of New York and California, while they number only 26 and 34 per million in the States of South Dakota and Mississippi. Yet these were the figures recorded by the census of 1930. The voice of the architects is all the more likely to be heard, as with ‘America’s coming of age’ the appreciation of aesthetic values is spreading to new strata of society.

The often-referred-to report of the University Grants Committee particularly draws the attention of Local Government circles to the advantages of appointing university graduates to work ‘which they should be particularly well fitted to perform’.² It quotes previous recommendations of Royal Commissions emphasizing the desirability of this. To our knowledge only the London County Council has so far acted on these recommendations. On the other hand it is well known that the Government Civil Service

¹ Albert Farwell Bemis, *The Evolving House*; vol. ii, *The Economics of Shelter*, Cambridge, 1934, pp. 142 and 337.

² *Loc. cit.*, pp. 31-2.

in Great Britain owes much of its great reputation to the outstanding qualifications of its members, of whom a large proportion are university graduates.

The very convincing example of the British Civil Service is probably one reason for the demand that the United States should develop a more complete and more permanent civil service. Under the present administration the movement has greatly gained in strength. Many new positions have been created for professional workers. Furthermore, as we have indicated before, the work accomplished by white-collar relief workers has helped to bring home to the public an appreciation of activities hitherto under-developed—potential demands have become effective, with the result that many of the relief workers may see their temporary positions made permanent.

Last but not least, the movement for a better utilization of leisure time promises to lead to the creation of tens of thousands of new positions for professional workers throughout the world. The Fascist countries, Germany with its 'Strength through joy' (*Kraft durch Freude*) and Italy with its 'After Work' (*Dopo Lavoro*) movements, are at present leading in this field, though they have given to their respective organizations a political colouring which is hardly likely to prove acceptable to other countries.

The means to stimulate potential demands can be summarized shortly under three headings: (1) education in the broadest sense of the word; (2) government regulation; (3) the training of professional workers particularly qualified for the new positions to be created, in the hope that an effective demand will follow. In view of what has been said about the work undertaken in this respect by professional organizations, appointments boards, &c., it is unnecessary to say much more on the *first* point. The special tasks which might be assumed by schools of all grades will be considered later as part of a possible programme of educational planning. Suffice it to say at this point that several Governments have warmly supported the efforts of professional organizations to make the public 'profession-minded', i.e. to inculcate a greater appreciation of professional services. One example is the Hungarian Committee for Unemployed Graduates, which has received the support of the Ministry of Education in its propaganda by radio and in the press, through lectures and circulars, in favour of the employment of professional workers. Another example is that of the Polish

Institute for the Formation and Rehabilitation of Professional Workers, which with government support has carried on intensive propaganda to increase the demand for professional services.

As regards the *second* category—government regulation—the action of Bulgaria is particularly instructive, though obviously not adaptable to English or American conditions. Not content with propaganda, the Government decreed that certain of the large industrial enterprises had to have a number of university-trained people amongst their higher employees. The Government felt all the more justified in imposing this rule, as it had taken upon itself to stimulate and at the same time satisfy a potential demand in another direction. In 1934 it carried through large municipal reforms in the rural districts, replacing the mayors, up till then elected by the people, by government officials with university training. This is not the place to enter on a discussion of the merits of this reform, but there is no doubt that the reform was inspired *inter alia* by a desire to improve municipal administration throughout the country. More than 500 graduates with legal training found positions in consequence. A similar reform is under consideration in Yugoslavia. The Leader of the Opposition in the Hungarian Parliament, M. Tiburce Eckhardt, has for some years led a campaign for the appointment of agricultural advisers to agricultural communities. All these measures are undoubtedly helping to awaken the rural population to more advanced ideas and thus lead to an increased demand for professional services. That some of the measures are coercive to an extent which would make them impracticable in more democratic countries is another problem altogether.

The *third* way of stimulating new demands puts a heavy responsibility on those who plan vocational curricula. The idea itself is simple: professional work convinces by its quality, i.e. it creates its own demand. Where there are under-developed occupational fields, qualified workers are therefore likely to arouse a realization of dormant needs and, provided the economic means are available, a new demand will become effective. One example was mentioned when we spoke of the professional work of women, which has resulted in a demand for certain types of social services. It is equally conceivable that well-trained librarians of the pioneer type may create a demand for public libraries in districts in which they are now unknown. Another field which in many countries has been

badly neglected is that of co-operatives of all kinds. Success or failure in training people for these fields depends, however—and here lies the great difficulty—upon clear insight into social and economic conditions. Potential needs may be so deeply buried that they cannot be brought to the surface. The fact that public libraries have been a success in the United States does not mean that they will be successful in India, where 90 per cent. of the population is illiterate. Or again co-operatives, highly successful in the Nordic countries, may be a complete failure in some of the more southern countries, with the happy-go-lucky character of their populations, averse to every form of organization. In the planning of highly specialized curricula designed to stimulate new demands it is therefore essential that social and economic experts with a great deal of practical sense should be consulted.

(b) *Extra-marginal demands.*

In order to satisfy an extra-marginal demand, i.e. needs which are recognized but which cannot be met owing to poverty,¹ two types of measures are required: (1) provisions to strengthen the low purchasing-power of the communities in need of professional services or to lower the price they have to pay for them; (2) measures to adapt professional workers to the poor and frequently unsatisfactory living-conditions in these communities. Under the first head a good deal has been accomplished in various parts of the world. We shall leave aside the manifold and, during recent years, alas, only too futile measures of the various Governments to improve the general economic situation and to increase the purchasing-power of the masses. A discussion of these measures clearly transcends the scope of this report. Those specially designed to increase the consumption of professional services range from the development of co-operative movements to the extension of insurance schemes and the provision of professional services by the Government itself. In Yugoslavia some communes have successfully introduced the co-operative system for medical services.

¹ It hardly needs pointing out that the distinction between a potential and an extra-marginal demand is often not clearly marked. A community may, e.g., be both too poor to afford adequate medical services and too backward to feel a need for them. In such a case it is obvious that the various measures we have already described for stimulating demand will have to be employed and that, furthermore, provisions will have to be made to bring professional services within the reach of the community.

Being too poor individually to pay for a medical officer, they formed into groups to finance one.¹ A variety of co-operative plans for the same purpose are operating in some parts of the United States. In Canada about thirty rural areas in Saskatchewan and three in Manitoba had by 1931 employed physicians serving 1,200–2,000 persons each. The necessary funds were secured by taxation. In some parts of Europe where there are no schools for national minorities, these minorities have at times maintained their own schools and teachers with great cost to themselves, borne by co-operative effort.

Most European countries have extensive schemes of medical insurance, either voluntary as in Denmark or most often compulsory. It has been the tendency since the end of the War to extend these schemes, originally designed for the impecunious sections of the urban population, to agricultural districts. We are aware of the opposition of some medical associations to them—an opposition much less marked in Europe than in the United States—but it is obvious that from an economic point of view they have done much to make adequate medical services attainable in quarters where they were particularly needed. They may in some instances have reduced the incomes of individual physicians, though numerous instances could be cited where the introduction of the panel system has led to their earning greatly increased incomes. They have certainly made possible the establishment of additional doctors in localities whose poverty had prevented it before and have thus helped towards a better distribution of physicians throughout the various countries.²

The educational level of some communities is so low that any

¹ M. Colombain, 'Rural Hygiene and Health Co-operative Societies in Yugoslavia', in *International Labour Review*, vol. xxxii, no. 1, July 1935, pp. 19–38.

² Medical insurance must not be confused with 'state medicine' or 'socialized medicine', as has been repeatedly pointed out by the advocates of medical insurance in the United States. Dr. Edgar Sydenstricker of the Milbank Memorial Fund in New York, c.g., emphasizes that in the best systems of medical insurance, elaborated in close collaboration with the Medical Associations, all professional matters are left under professional control, all licensed practitioners have the privilege of being insurance practitioners or not, and the method of remuneration (salary, fee, or *per-capita* payment) is a choice left to the professions. The 18,000 physicians engaged in British insurance practice are not employed by a government agency, they are private practitioners who have chosen to engage in insurance practice while also carrying on their other private practice among non-insured persons. (Edgar Sydenstricker, 'The Economics of Medical Care', in *Virginia Medical Monthly*, Jan. 1935.)

co-operative efforts are doomed to failure. These communities are often also not insurable owing to the extreme poverty and backwardness of their population. In these cases professional services have to be provided and financed by outside agencies. The outstanding services rendered by mission doctors and teachers are a case in point. Generally speaking, however, the task of providing such services lies with the Government, local or provincial. This is clearly the case in India, where the poverty and the illiteracy of the masses are a barrier to the fuller utilization of professional services of every kind. Most of the reports of the various official and semi-official committees in India set up to investigate the unemployment among the educated classes are therefore unanimous in suggesting that primary education be extended or improved. The Sapru Report, to cite only one example, states that 'this may mean the employment of more teachers and greater expenditure, but we fear the problem cannot be solved without assuming an increasing financial responsibility'.¹ Several reports emphasize also how desirable it is to extend existing medical services by appointing additional medical officers or subsidizing private practitioners. That similar measures may become necessary in highly developed countries as well is shown by the subsidies which, as will be remembered, the Federal Government of the U.S.A. had to put at the disposal of financially weak districts to enable them to keep open their schools during the worst days of the depression. In Bulgaria stringent measures have been taken to provide needed services in rural districts by forcing professional workers to leave the congested urban districts and serve in the rural areas, thus remedying the conditions both of the villages and of the unemployed graduates. Legislative regulations of March 29, 1935, make it compulsory for every newly qualified doctor to spend two years in rural districts, either in the service of the State or of the local authorities or in private practice, before being entitled to practise in any other part of the country. If a physician is unable to obtain a post in a rural area, he is entitled to receive a salary from the Department of Public Health, and the local authorities must provide him with accommodation and means of transport.

This brings us to the second aspect of our problem; the reluctance manifested by professional workers to settle in rural dis-

¹ *Op. cit.*, p. 188.

tricts. The main reason for this is, of course, the poverty of the people, which makes it impossible for a professional man to earn a living and to keep up with the scientific progress made in his profession. It has been shown that there are ways and means of overcoming that difficulty. It is, however, by no means the only one. It is often overlooked that university graduates, even though they may originally come from provincial districts, lose contact with the provinces and are, at the conclusion of their studies, ill adapted to return to the villages. They have become used to the amenities of city life and are not prepared to return to what they consider a dull and unattractive rural life. These difficulties have been admirably described by Sir George Anderson, Educational Commissioner with the Government of India. In analysing the situation in India he writes:

'It is true that in England and elsewhere the brighter pupils from the villages, with the assistance of scholarships, often find their way to secondary schools and universities in the towns, but the difference between England and India is that young men and women in England are not thereby so dissociated from their rural environment as they are in India. There are available to English graduates many avenues of service to the countryside which maintain contact between town and country. The English universities give at any rate some return to the villages for what they have taken in the persons of the village parson, the country squire, and the rural doctor. Such are the deadening and uncomfortable conditions of village life in India, however, that once a child has left his village in quest of education in a town, he rarely, if ever, returns to his village for more than a brief sojourn or even takes any interest in its development. There is thus little guidance or leadership to the villages except what comes from bureaucratic sources.'¹

In addition, all too many graduates have caught the germ of that pernicious disease common to present-day society—the desire to 'get rich quick', a desire they hope to fulfil more easily in the city than on the land. With many it has become an obsession; they prefer to starve in some congested city rather than make a modest living on the land, they seek their salvation in protests, riots, and revolutions rather than by attempting to fit in where they are most needed. In France medical students and even outstanding representatives of the medical profession have been most vocal in demanding every kind of government protection to counteract the

¹ Sir George Anderson, *Progress of Education in India, 1927-1932*, Delhi, 1934, p. 121.

disastrous overcrowding of the professions. Yet M. Cavalier, Director of Higher Education in the Ministry of National Education, in a recent newspaper interview declared that it was very difficult to secure physicians for provincial hospitals because the salaries offered were considered insufficient: 'Des maires de province demandent des médecins pour leurs œuvres d'assistance et leurs sanatoria. Ils leur offrent un traitement de 40,000 francs. Ils n'en trouvent pas . . .'¹

Legislative action alone, obliging young graduates to work in rural districts, is not likely to solve the problem. Those who against their will are forced to work in some village are not likely to be particularly sympathetic to the habits and needs of the villagers and will therefore not tender the best service of which they are capable. A few may acquire the *goût de la vie simple* but the majority will wait impatiently for the moment when they can leave their involuntary exile. This difficulty was recognized by the Committee of International Student Organizations, which in April 1935 resolved 'that the universities and the organizations of students should take steps to train young professional workers for the exercise of their profession in rural . . . areas'. This sentence contains a whole programme. It asks of the universities to supplement professional curricula by courses on social and economic conditions in the country, and even on folk-lore and peasant art. It suggests that student and other university organizations should organize social service groups through which the students, while still at the university, will be given an opportunity to enter into direct contact with the life in rural districts. This latter form of 'training' is probably more effective, because more real, than any theoretical course. Many countries have experimented with such service groups. Under the leadership of Professor Gusti, the eminent sociologist of the University of Bucharest, students in Romania have for years spent their holidays in rural districts surveying the life of the villagers, helping them in their daily work, assembling a valuable collection of folk-lore. In Bulgaria a 'Youth Association for the Economic and Cultural Development of the Bulgarian Village' has sent teams of students, particularly advanced medical and agricultural students as well as future teachers, to villages in all parts of the country, to help in the struggle against illiteracy and for the improvement of hygienic conditions and

¹ 'Qu'avez-vous fait pour la jeunesse?', in *Excelsior*, Oct. 18, 1935.

agricultural methods.¹ The Division of Extension of the American University at Cairo has since 1925 organized village health work and has used its students for fighting insalubrious conditions and some of the endemic diseases such as trachoma.² These examples could easily be multiplied. All these efforts are not only of immediate social usefulness, but they help to keep students from the provinces in touch with their native soil and to adapt students from the cities to the primitive conditions on the land. They help to create a new social consciousness amongst some of the best students and induce them—we are not talking theory but concrete experience—to forgo the pleasures of city life and higher incomes in order to find a deep satisfaction in a life of service to their people. As modern conveniences like electricity, the cinema, and the radio spread to rural districts, this movement from the city to the land is likely to gain in impetus and a better territorial distribution of professional workers will be achieved.

Emigration

The question whether emigration offers a way out of the professional congestion in Europe and elsewhere has to a large extent been answered. As long as nationalism in its present extreme forms governs the world, emigration must of necessity remain confined to very narrow limits. The various anti-foreign measures which have been described in some detail have practically paralysed the migration of professional workers. The fact that the same professional organizations which clamour most loudly for the protection of the home market against foreign competition are at times—any generalization would be unjustified—demanding for their members the right to free practice in other countries may be a cause for mirth but offers little consolation.

Practically the only form of emigration possible at the present time is to overseas colonies or mandated territories. That these territories need trained professional workers in almost every field is beyond doubt. That their populations are on the whole unable to offer adequate payment for these services is also certain. Most of the medical and educational services are therefore organized on

¹ D. Mischaikoff, 'Die Hochschuljugend in den Dörfern Bulgariens', in *Vox Studentium*, vol. vi, July-Sept. 1929, pp. 123 ff.

² Theodore Yoder, 'Students and Village Health in Egypt', in *Vox Studentium*, vol. vi, Oct.-Dec. 1929, pp. 185 ff.

a state basis, i.e. physicians and teachers are officials of the colonial or territorial administration. This fact is sufficient to exclude practically always professional workers who are not nationals of the colonial or mandated powers. During recent years most of these powers have also forbidden the recruiting of foreign experts for private enterprises. Even missions have been restricted in the choice of their personnel. There are exceptions to the general rule but they are of such little practical importance that it would serve no useful purpose to enumerate them. The reasons for all these restrictions and prohibitions are of course not only or even primarily economic. Their political character is obvious. The *beati possidentes* are full of apprehension lest the foreign doctors or engineers prove to be the advance-guard of foreign imperialist powers. The troubled political situation of to-day gives them ample cause not to lessen their vigilance.

However, even the emigration of nationals of the few privileged countries has sharply declined in recent years—with the exception of Italians to the new Italian Empire in Africa and Japanese to Manchukuo. The decline is due partly to government economies and the difficulties of private enterprises caused by the depression, and partly because some of the colonies such as the Dutch East Indies are gradually and with the support of the colonial powers building up their own supply of intellectual workers. Yet there is no reason to be unduly pessimistic. The educational emancipation of the native races is slow—too slow from a general humanitarian point of view—and it is therefore to be anticipated that with a return to improved economic conditions the demand for foreign professional workers will increase. The emigration of British, French, Belgian, and Dutch graduates to overseas possessions will gain in momentum. Even to-day the number of those who are willing and prepared to go is at times too small to meet the growing demand. Efforts are being made to interest larger numbers of graduates in colonial careers, whether by way of propaganda or through special university courses. Should these measures prove inadequate it is thinkable that the nationals of such countries as Switzerland or Denmark, which are not suspected of imperialistic aspirations, may find easier access once more to colonies, mandated territories, or countries such as Manchukuo which are under the virtual domination of some foreign power. It is not safe to go beyond such vague predictions. Possible changes in the mandate

system open a wide field for conjecture on which we are not prepared to venture. At all events it is not likely that the undeveloped regions of Asia or Africa will at any time offer an outlet for a sufficiently large number of graduates of such countries as Austria, Hungary, or Romania to make much difference to the acute overcrowding of the professions in these countries.

It is often suggested that the vast new countries of the Latin-American continent should be able and willing to continue past policies and to accept some of the surplus labour of Europe, particularly in the professional field. The exponents of this idea forget on the one hand that these countries have not proved immune to the onslaught of nationalism, and on the other hand that most of them have during the last ten or twenty years greatly developed their own systems of higher education. Some of the South American laws restricting the work of foreign intellectuals are even more stringent than the European laws on which they have been modelled. In Brazil, for instance, only native-born Brazilians may practise medicine. For these reasons it is futile to expect that the South American continent will in future contribute much towards solving the unemployment crisis amongst professional workers in Europe or elsewhere.

Notwithstanding these facts, it is of course true that a few enterprising individuals every year still succeed in securing access to foreign countries and work in line with their superior training. Teachers, chemists, engineers, and other technical experts have on the whole the best chances. A very careful survey of occupational opportunities and loopholes in legislation might even lead to the discovery of further possibilities for emigration. With this idea in mind 'Pax Romana', the Catholic international student organization, put a proposal before the Committee of International Student Organizations, that an international agency be established for the placing of intellectual workers.¹ This proposal was taken up and the following resolution passed:

"The Committee further urges the international organizations of students and professional workers to consider the possibility of setting

¹ In presenting the proposal to the Tenth Plenary Session of the Committee of International Student Organizations on April 10 and 11, 1935, Mr. Rudi Salat, Administrative Secretary of Pax Romana, gave a detailed, though at times rather optimistic, report on the possibilities for overseas emigration. The essential parts of this report appeared under the title 'Placement de jeunes diplômés dans les pays d'outre-mer', in *Coopération Intellectuelle*, nos. 55-6, pp. 379-90.

up, at the earliest possible moment, an international body to undertake internationally the actual work of placing professional workers in employment, more especially in new countries, on the basis of such general information as it might obtain from the International Labour Office.¹

The fact that this resolution has not led to any concrete action, in spite of the sympathetic interest of the International Labour Office and of the Institute of Intellectual Co-operation, is one more indication of the almost insurmountable difficulties in the way of any attempt to organize the emigration of professional workers. As a remedy against the overcrowding in the professions, emigration is likely to remain ineffective.

¹ 'Remedies for Unemployment among Professional Workers', loc. cit., p. 318.

PART IV
OCCUPATIONAL AND EDUCATIONAL
PLANNING

IX

PLANLESS EDUCATION IN A CHANGING SOCIETY

TORTUOUS and tedious ways had to be followed to bring together the facts essential for this study. The time has now come to summarize, but not only to summarize. This is the place where the statistical scaffolding has to disappear, where we have to stand back from the welter of detailed information, to discover whether there is any design in what at close range appears to be a confusing multitude of disparate facts. At the risk of appearing dogmatic, we must discard considerations of detail in order to see and understand the great historical trends to which our society is subject. Education can modify these trends—to deny this possibility would be philosophical defeatism and contrary to experience—but it cannot resist them or be indifferent to them.

A CENTURY OF EDUCATION

This century has been called the century of education. The first thirty-five years of it certainly justify this epithet. A great many figures have been produced to show that nearly everywhere student enrolments have increased by leaps and bounds. New colleges and universities have been founded and old institutions have in some cases seen their student enrolments multiply six- or sevenfold. This development has obviously not been confined to the institutions of higher learning. Illiteracy figures are dwindling fast. With the exception of such countries as India, which are only at the beginning of the educational revolution, primary education has everywhere been made compulsory or, where it was already compulsory, sufficient educational facilities have been provided to put existing laws into full operation. In many countries the school-leaving age has been raised or is about to be so.¹ Most important of all, the dividing line between primary and secondary education is being more and more obliterated. Growing numbers

¹ Cf. *La Scolarité obligatoire et sa prolongation*, Publications du Bureau International d'Éducation, no. 33, Geneva, 1934.

of young people, not content with a primary education, flock into secondary schools. The United States lead the way with one out of every two children of high-school age actually in school. Europe, with only one child out of five or more in secondary schools, is obviously more conservative, but attendance in secondary schools has nevertheless grown very rapidly in all countries, while the French school reform (see p. 62), which is a sign of the times, points the way to further increase. The secondary schools, which in most countries thirty years ago were definitely reserved for an *elite* of wealth, though not necessarily of intellect, are gradually becoming schools for the people.

There is small reason to assume that, barring new wars or revolutionary developments, the urge for more education will weaken as times goes on. The end of illiteracy, at least in the western world, is in sight unless mankind lapses into barbarism again. At the same time the number of people is bound to grow who will not be satisfied with an elementary knowledge of the three R's, and who will find opportunity for further training in secondary schools. A further expansion of higher education may be expected. Even if total enrolments should remain stationary owing to a further decrease in birth-rates, the proportion of young people in the colleges will grow unless it is found desirable and possible to direct the urge for more education into new channels.

Some of the main forces making for an expansion of higher education have been analysed in earlier parts of this book. Their combined effect is formidable in creating both a more intense demand for higher education and the means to satisfy it. The industrial revolution and the evolution of political thought which went with it facilitated the emancipation of the lower classes and of women. The old system of caste and class either broke down or lost much of its rigidity, and the way to secondary and then to higher education opened to an ever-widening section of the population. The new opportunities were eagerly seized upon, for they meant a fuller life. As the facilities for secondary education expanded, the pressure upon colleges and universities became greater, for education happily engenders a desire for more. Higher education, however, had an important by-product: it conferred social standing, it opened up the way to higher positions and better pay. Social standing and possibilities for individual promotion were interpreted in terms of diplomas. Material progress

and declining birth-rates did the rest. Higher education became financially accessible to a larger number of families.

The use of the past tense may be misleading: the forces engendered during the last century are not played out: the urge for higher education persists. The very fact that the educational emancipation of the working classes, particularly on the European continent, is still in its infancy and that the emancipation of women is being assailed in many quarters indicates that we are still at the beginning rather than at the end of an epoch. The underprivileged want their share of the good life, they want positions and standing, and they have discovered that the way to advance lies through education, higher education if possible. They will continue to struggle for it, to put by their last penny in order to assure their children of a better future.

It may well be asked why education has become the main road to success, why the aspirations and the wishes of the people concentrate more and more on education as a means to standing and power. The obvious and probably correct explanation is one which has been touched upon before: modern life has become so complex that only those possessed of much knowledge, of an education far superior to anything considered necessary a few decades ago, are able to master it or even to attempt its mastery. The man of the twentieth century moves in a world of highly complicated machinery, he belongs to a community which stretches over thousands of miles, and which in turn is connected by innumerable threads with all the other national communities which compose the world's population. Gone is the time when the peasant only needed to use his simple implements to till the soil and to sell the fruit of his labours in person in the nearest town. Gone is the time when industries produced for a small, well-defined market or when easy riches could be gained by adventurers in foreign lands. Production, commerce, the business of government, all have grown infinitely complicated, they all need men and women of high education with a great deal of expert knowledge—the educated person alone is likely to be successful in the ordinary business of life, and with success he becomes the *Wunschbild* of the masses, the example to be emulated.

Each epoch has its own avenues to success, its own ideal type of man. There have been periods in the history of the various nations when the warrior enjoyed supreme standing. Through

great deeds of bravery and heroism even the individual of low station could hope to rise in the social scale. Again there have been periods during which the successful business man commanded supreme respect. Many were the millionaires of comparatively recent date who were never tired of telling of their modest beginnings in a ramshackle cottage or on a street corner selling newspapers, and of their subsequent meteoric rise. Even to-day this type of business man holds a large place in the phantasies of the under-privileged. The realization is, however, growing amongst ever widening sections of the population that robustness, hard work, and a fair amount of common sense are not necessarily sufficient to make a successful business man. The appalling disorder prevailing at present in all fields of life, the obvious helplessness and lack of orientation on the part of leaders of industry and commerce, the growing tendency to consult experts, these are all elements likely to enhance the prestige and the standing of the highly educated men. Franklin D. Roosevelt's 'brain trust' may have been derided by political foes and disbanded, but it is significant that the very opponents of the President found it necessary to establish a 'brain trust' of their own. The growing emphasis on a highly trained civil service is another sign of the times pointing in the same direction.

Any one able to visualize the almost elemental strength of the urge for education arising out of society's latest evolution will recognize the futility of most of the measures taken or contemplated to restrict student enrolments. Stricter examinations, higher fees, lengthening of study courses are but palliatives utterly inadequate to resist the rising tide of those who present themselves at the doors of the universities. For every student or prospective student eliminated there are two or three eager to enter. Wherever such measures have been taken they have proved ineffective, or have at best succeeded in temporarily stemming the tide. In most cases they were taken half-heartedly—few dared to support raising fees to a point which would make them prohibitive, or stiffening examinations till they allowed only the select few to pass. Consciously or unconsciously those in power have sensed the danger of such procedure. Social peace does not depend on what the masses of the people possess but on what they hope to attain. They will tolerate and support a system which they believe offers them through education a chance to improve the lot of their children,

if not their own. Revolutions are born of hopelessness. If the avenue which rightly or wrongly they believe to lead to success is closed to them they are likely to revolt.

THE GERMAN WARNING

The example of Germany does not disprove this argument. True, here is a country which has taken the most stringent measures to curb the zeal of those who were pressing into the universities. Young people and their parents have been told bluntly that these institutions are not for them, that higher education is for the few and not for the many, and no revolution has followed. On the contrary the majority of people have welcomed the action of the Government. The reasons for this attitude, surprising as it may appear at first sight, are not far to seek. The first reason is undoubtedly that the masses of German people had become disillusioned about higher education as an avenue to success. Too many of those who had graduated had remained unemployed, a burden to themselves and to society. Because the hopes staked on higher education had flown so high, the disappointment which followed was all the keener. The disillusionment was further accentuated by the fact that the German people, as highly educated as any in the world, were under the peace treaties relegated to an inferior position, treated as a backward people incapable of contributing to the peaceful reconstruction of the world. Thus the Germans were psychologically prepared when they were told that higher education for the many, far from being in the best interests of the country, was positively harmful. At the same time, and as a counterpart of the disillusionment, another development occurred which offers the final key to an understanding of the German situation. The devaluation of intellectual work, of the mind itself, prepared the way for the establishment of a new—or, perhaps, the re-establishment of a very old—ideal of man, the man Germany needed, the man for whom there were honours and advancement in store. Old man 'warrior' was resuscitated and held up as an ideal to strive after. The youth of the country were put into uniforms, as soldiers they were trained to fight for Germany's place in the sun, as soldiers they marched to work. The egalitarian cravings of the masses were—at least temporarily—satisfied. Not only did the son of the university professor, of the captain of industry, march side by side with the

son of the day-labourer, but the proletarian child was given a real chance of rising in the new hierarchy. He could become a leader of men, if only of the few members of an S.A. group. Emancipation came no longer through education but through service in labour camps, in an S.S. or S.A. group or some other party organization. Certain drawbacks such as the decline in real wages were overlooked, or ascribed to enemies abroad or the Jews at home, or borne for the sake of promises for the future. The masses were told that the evil was temporary, that there was a great future in store for them, and that in any case material goods counted for little in a country where honour and standing were reserved to those who unselfishly served the community. Was it not true that Hitler himself and most of his lieutenants were sons of the people whom they served, and who had put them in their exalted positions?

The simple warrior type has no patience with the complications of modern life. Here again the new leaders cut the Gordian knot. They not only preached the simple life and return to the land, but their political and economic conceptions became extremely simplified. They became so simple that the common man could understand them without going to the trouble of acquiring an advanced education. The complicated network of economic and financial relations with foreign countries which enmeshed Germany was to be torn asunder. Autarky, self-sufficiency, became the slogan. Germany is to be independent, mistress of her own destinies. If the raw materials of the country, if the work of the industrial labourer and of the peasant are insufficient to satisfy the needs of the German people there are colonies, there are new territories to be acquired. Everything is being done to increase the German population, to develop the army. A growing population, a well-organized army—they are the guarantees for ultimate power. And once that power is attained Germans will have peace.

It may be held that this picture is overdrawn. It is not as if the German people were gradually being deprived of education on all levels. Primary schools have certainly not suffered, except in the sense that everything is being done to indoctrinate the children with the new Nazi gospel. The secondary schools have suffered more, and efforts continue to diminish enrolments. It is only in the institutions of higher learning that the new orientation of German life has become obvious. Nor is this re-orientation endorsed by the German people as a whole. There are large

sections of the population who do not share the official views, who regret the ascendancy of the warrior over the *homo sapiens*. Yet they are probably in the minority and their voice is rarely heard. These considerations, however, do not invalidate the general argument. The treatment meted out to Germany after the War has had its effects: it is impossible to treat a great and educated nation like a dangerous tribe of aborigines without awakening the instincts of the cave-man which slumber in every human being. A state of mind has been created which was normal during earlier stages of human development, but must be considered pathological in the twentieth century.¹

These references to the change in the German attitude, not only to education but to economic and political problems, to the ideal of man itself, are not gratuitous. Everything hangs together: the loss of faith in education as a means of collective and individual advance, the artificial simplification of economic and political concepts, the resurrection of the warrior and of the creed of physical force as the *ultima ratio*. It is essential to recognize the interdependence of all these elements. It is, of course, possible—and advocates of such a policy exist in all parts of the world—to multiply the stifling restrictions that keep men out of the universities, thus penalizing at every step those for whom intellectual pursuits are the very essence of life. It is also possible to institute tests which are foreign to the very essence of learning, thus asserting one's faith in physical prowess and political conformity rather than in intellectual ability. However, where this course is taken, everything changes. A new order arises whose implications once they are clearly understood render further comment unnecessary.

The fear of social unrest and the implications of the German 'solution' once they are fully realized will in all probability prevent other countries from embarking on a policy of prohibitive restric-

¹ At a time when political passions run high, any attempt to arrive at unbiased conclusions regarding the position of this or that country is open to misinterpretation. In order to avoid futile discussion, we want to emphasize again that not only can much of recent German history be easily explained, but certain aspects of the National-Socialist philosophy of education do not lack positive value. Thus the anti-intellectualism, whose origins we have attempted to trace (see pp. 176 ff.), can be explained and supported as a reaction against an arid and sterile rationalism and the too academic atmosphere of the universities. The fact remains, however, that in an effort to remedy existing evils 'Geist' as such has been discredited and the *homo sapiens* superseded by that ideal of man which emphasizes brawn rather than brains.

tions. In other words the educational emancipation of the masses will continue. Where will it lead? At this point the full tragedy of the present-day situation appears in the sharpest light. The democratic countries of the West and those countries which have assimilated western cultural ideas believe in education. They have realized that they need highly educated men and women, to whom they are giving positions of influence and prominence. More and more young people prepare themselves, until the day comes when for many of them there is simply no work. There is as yet no other country in the world with tens of thousands of unemployed university graduates such as Germany had in 1933. But there are many countries which are not far from the danger-point, where the professions are getting overcrowded and are likely to remain so even if a time of great prosperity should follow the lean years of depression. Reference has been made to the Nazi tendencies which are becoming evident here and there. Young people, if not their parents, are beginning to wonder whether there is not some justification for the defeatist attitude to higher education which characterizes the new German *Weltanschauung*. The world gets caught in a vicious circle: the very intensity of the belief in higher education leads to an over-supply of graduates and ensuing unemployment, followed by disillusionment and the discrediting of intellectual training and effort. The desire for progress leads to regress.

A CHALLENGE TO EDUCATORS AND SOCIAL SCIENTISTS

The situation presents a sharp challenge to educators and social scientists alike. It will be for them to discover a way out of the present *impasse*. Education is a precious gift to which mankind owes much of its dignity, but education must be saved from itself. In order to maintain its exalted place, in order that it may benefit the largest number of people and thus remain one of the chief safeguards for an orderly evolution of human society, it cannot be allowed to develop haphazard, to grow without a clear sense of direction and a realization of its purposes. In one word education has to be planned, it has to be adapted to the changing needs of a changing society.

It has often been stated that education is a function of society, i.e. that its methods and its content are determined by the character of the society which it serves. This statement holds good in a

static or slowly evolving society; the schools of the fathers are then good enough for the sons. In a society which passes through rapid change education is only too often at least two steps removed from the realities of the life for which it prepares. Time-honoured skills and elements of knowledge may have been made obsolete by new inventions, evolving social concepts may make new demands upon education, yet the schools may continue to teach their old curricula and instil outworn social concepts. What makes the situation still worse is that schools are needed to serve not present-day society but the society which will exist when the children are ready to do their share of the world's work. Where the schools are slow in adapting their curricula, where educational leaders lack the foresight to understand future needs, maladjustment fraught with grave consequences is inevitable. President Hoover's Research Committee on Social Trends recognized the danger:

'... school curricula are slow in adjusting to the new occupations which machines create. There is in our social organization an institutional inertia, and in our social philosophies a tradition of rigidity. Unless there is a speeding up of social invention or a slowing down of mechanical invention, grave maladjustments are certain to result.'

A few pages further on in the report we find an even more specific statement:

'The changes in individual, economic, and social conditions which have taken place in recent years create a demand for a kind of education radically different from that which was regarded as adequate in earlier periods when the social order was comparatively static. Members of a changing society must be prepared to readjust their ideas and their habits of life. They not only must be possessed of certain types of knowledge and skill which were common at the time when they went to school, but they must be trained in such a way as to make them adaptable to new conditions.'

George Counts offers the following comment: 'There can be no all-embracing educational philosophy, policy, or programme suited to all cultures or all ages.'

These few quotations show that the problem of how to synchronize education with social needs has not been unnoticed. Notwithstanding the misgivings and warnings of outstanding social

¹ *Recent Social Trends in the United States*, loc. cit., p. xxviii. ² *Ibid.*, p. xlviii.

³ George S. Counts, *The Social Foundations of Education*, Part IX of the Report of the Commission on the Social Studies, New York, 1934, p. 1.

scientists and educators little has, however, been done in actual practice to adjust education to the needs of a changing society. Examples have been given in earlier parts of this book of how, both in some of the less developed countries as well as in the highly developed United States, faulty organization of the secondary schools helps to flood the colleges and universities with poorly qualified students. Because they are not receiving in secondary schools the kind of training which would satisfy them and which would prepare them for socially desirable occupations, they are forced to seek a higher education which evokes in them little enthusiasm. They leave the secondary schools as misfits, and often enough they continue to be misfits in the institutions of higher learning.

The rigidity of social philosophies and institutional inertia are certainly in part responsible for this state of affairs. Yet educators and social scientists bear a heavy part of the responsibility. Educators have either not known how to make their voices heard or they have remained indifferent. In many European countries teaching has remained a skill or at best an art. Pedagogy is a subject which is often conspicuously absent from university curricula. The majority of secondary-school teachers are let loose on the young generation without ever having studied seriously the methods of teaching, let alone the social implications of the work they are expected to accomplish. In other countries which abound with teachers' colleges and training courses the attention of prospective teachers has for a long time centred on an attempt to interpret educational methods and achievements in purely quantitative terms. In order to satisfy their ambition of turning education into a 'science' they have tried to eliminate everything which might interfere with their mechanistic formulas. In their zeal they have neglected the most important problem of all: that of preparing the young for life, not in *any* community, but in the community which eventually they would have to serve. In recent years a reaction has set in and social problems have become very much *à la mode*. In itself this development is certainly to be welcomed. Unfortunately the results obtained so far—there are of course notable exceptions—are not commensurate with the enthusiasm with which they have been hailed. Two dangers have become obvious. The one is that educational experts who cannot be expected to be fully trained economists, or social scientists have fallen

for all kinds of theories which might be useful to the professional economist, who knows their limitations and weaknesses, but which become dangerous and destructive weapons in the hands of the layman. Thus a new radicalism has sprung up which is based not on a careful analysis of contemporary economic and social facts and their evolution but upon the perusal of party programmes and the writings of a past age. The other danger which has manifested itself lies in the endeavour to look too far ahead. Instead of projecting existing trends into the future just as far as is reasonably safe, utopias are painted in glowing colours and it is understood that education is the road to them. At times these utopias are so remote from existing realities and possibilities that they threaten to discredit the legitimate efforts that are being made to see in education a means of peaceful evolution for society.¹

Social scientists and economists have done little to help educators find their way in the maze of social and economic complexities. Ever since economics has become a branch of human learning, economists with few exceptions, such as John Stuart Mill, have centred their attention on the production of wealth rather than on distribution.² In so far as they have paid any attention to education they have seen in it primarily a means for increasing material wealth. 'No change', said Marshall in 1890, 'would conduce so much to a rapid increase of material wealth as an improvement in our schools.'³ Furthermore, economists have for a long time based their theories on a static conception of society and have only in comparatively recent times turned to explore the dynamics of economic and social life. With this change in orientation education is beginning to figure more largely in economic treatises. It is gradually being realized that education may play an important rôle in supplying just that type of labour which is best prepared to meet the demands of a changing society. It is being recognized that education has a distributive function in the sense that schools may help to bring about a better occupational distribution, by

¹ This book being the report of a survey and not an academic treatise, it would serve no useful purpose to quote specific instances. A more fundamental discussion of the issues touched upon must be reserved for another occasion.

² Until fairly recently it was rather natural for economists to concentrate on the question of production. Increased production in an age of scarcity was a most important thing. Nowadays this is, of course, much less true, and it is for that reason that economists are beginning to give more attention to distribution.

³ Alfred Marshall, *Principles of Economics*, London, 1920, p. 212.

preparing the young for those occupations in which there is likely to be a demand for their services. It is held that such a better occupational distribution will result also in a more even distribution of wealth, i.e. that it will tend to narrow the margin between the wages paid for skilled and unskilled work,¹ and between the incomes of manual and intellectual workers.² In one word it is being discovered that education properly conceived and planned may contribute towards a better organization of society and its peaceful evolution.

In order that education may effectively live up to this task it is, however, not enough to lay down general theories. What is needed is a clear insight into existing trends on the labour market, a full understanding of the shifts in occupational patterns caused by technological progress and its repercussions upon the economic structure and the social concepts of the various countries. It is only on the basis of such insight and understanding that it will be possible to arrive at something like an 'occupational plan', a vision, if not a mathematically correct estimate, of future needs in the various professions and occupations. The 'plan' will have to cover the market for both skilled and unskilled work, for manual and intellectual workers. Numerous attempts have been made in recent years, as has been shown, to predict the future demand in the professions. Most of these attempts have proved futile. First, because they did not take sufficient account of the new demand for professional workers likely to arise out of the present economic and social evolution: they were thus led to underestimate the 'additional' demand. Secondly, they have proved inadequate because they were confined to evaluating prospects in the professions for which a higher education was required or desirable. The findings were for that reason essentially negative. In countries which suffer from a general overcrowding, extending to most of the professions, they simply confirmed a fact about which few people had much doubt. They did not indicate any alternatives,

¹ For a concise statement of the problem see Allan G. B. Fisher, 'Education and Relative Wage Rates', in *International Labour Review*, vol. xxv, no. 6, June 1932, pp. 742-64.

² A list of quotations from various economists who have dealt with this subject and its ramifications can be found in Harold F. Clark, *Economic Theory and Correct Occupational Distribution*, New York, 1931, chap. iii: 'What economists have to say about occupational distribution', pp. 25-54. While incomplete and partly out of date, this list may serve as a useful introduction to the subject.

they did not point the way towards a better occupational distribution throughout the field of gainful occupations. Here lies a task worthy of the best efforts of economists and social scientists. Education for work will continue to flounder as long as they have not spoken. They are not expected to attempt the impossible. The 'occupational plan' need not extend beyond the period commonly required to prepare the young people of to-day for the occupations and professions which they are to enter. Nor will any one expect them to evolve a fool-proof 'plan', sheltered from the effects of depressions, though they may help to mitigate the effects of economic depressions in so far as they are predictable. No one, however, is in a position to predict the dislocation, the disorganization, which might result from new wars or other catastrophes caused by human folly.

Only after economists and social scientists have spoken, only when the outlines of the 'occupational plan' become visible, will educators be in a position to do their share. It will be up to them, always in close collaboration with economists and other representatives of the social sciences, to work out an 'educational plan' as a counterpart to the 'occupational plan'. They will have to devise ways and means to reorganize if necessary the schools of all grades, so as to adapt their teaching to new social and occupational needs. Methods of selection, educational and vocational guidance, all will need improvement in the light of the occupational plan.

The lure of 'perfect' programmes is difficult to escape and we have to guard against uncontrolled imagination. An attempt will therefore be made in the next two—and last—chapters to outline what is practicable. Even then we realize that much of what will be suggested may take shape only in generations to come.

POSSIBILITIES AND LIMITS OF OCCUPATIONAL PLANNING

THE irony of fate has willed it that purposeful and socially relevant occupational planning is likely to be held up by the theories and opinions of some of the most ardent champions of an adaptation of education to occupational needs. In order to clear the way for a discussion of the possibilities and limits of occupational planning in this age it appears advisable, therefore, to deal with this paradoxical situation. The difficulties, as we see them, arise out of the faulty application of perfectly sound economic principles to a field which is not exclusively or even primarily governed by economic considerations.

OCCUPATIONAL PLANNING AND ECONOMIC DETERMINISM

Mention has been made in the last chapter of the thesis that education may bring about a better occupational distribution, which will tend to narrow the margin between the wages paid for skilled and unskilled work, between the income of manual and intellectual workers. There can be little doubt that this thesis is correct. A simple illustration will help to make it clear. Allan Fisher, in his article 'Education and Relative Wage Rates',¹ gives a great deal of information concerning the differentials in wages paid to skilled and unskilled workers. He shows that these differentials are largest in countries where the supply of unskilled, poorly educated workers is substantial in comparison with the supply of skilled workers. He records, for instance, bricklayers' and masons' wages as percentages of general building labourers' wages and shows that in January 1931 the differences in wages paid to unskilled labourers and skilled masons was as 100 to 267 in Belgrade and only 100 to 123 in Amsterdam. For printers he records similar differentials (245 in Belgrade and only 139 in Utrecht). The line of reasoning which these figures suggest is obvious. If through education and training the number of skilled workers increases, their wages are likely to decrease except where the demand for skilled workers increases proportionately. At the same time the wages of unskilled workers whose number declines

¹ Loc. cit., *passim*, particularly pp. 758-62.

are likely to go up, as their wage-level will be determined by their relative scarcity. *Ergo*, an increase of educational facilities and their extension to larger numbers of prospective workers will help to bridge the gulf which separates existing wage-levels; it will tend to reduce poverty and thus eliminate one of the chief causes of social unrest and of retarded material progress.

So far we are on safe ground. Matters begin to become very much more problematical where this thesis is applied to the market of intellectual labour, in which wages are determined not only by the quantity of the service offered but by their quality, or where the further idea is introduced that the main if not only motive why people seek more education is their desire to earn a larger income. This latter idea has been most forcefully put forward by Harold F. Clark, Professor of Educational Economics at Teachers' College, Columbia University, in his book *Economic Theory and Correct Occupational Distribution*.¹ His argument is based on the assumption that if people had free access to any amount of education, and if they had at the same time full information about wages and incomes paid in the various occupational groups, they would choose those educational careers which lead to the best-paid occupations. Provided that access to these occupations was not impeded by monopolizing efforts on the part of trade unions and professional organizations, e.g. efforts to restrict the number of workers in the various occupational groups in order to maintain wages at an artificially high level, a 'correct' occupational distribution² would result. The supply of workers in the highly paid occupational groups would soon become so large as to greatly depress the wages paid in those groups, with the result that fewer people would want to enter them. On the other hand the supply of workers in the poorly paid occupations would decrease and with growing scarcity of supply wages would go up. Gradually income-levels would become more equal: people of the same ability would

¹ Professor Clark is one of the few authorities who have devoted much of their work to the problem of occupational distribution. His book is most stimulating and we are eager to acknowledge our indebtedness to him. If the thoughts he has set moving diverge from his own line of reasoning it is hoped that they may throw further light on an extremely complicated subject whose importance he was one of the first to realize.

² Professor Clark defines 'correct' occupational distribution in the following terms: 'Occupational distribution is correct when people of equal ability receive equal wages in all occupations.' (Op. cit., p. 1; a full elaboration of this definition is given in chap. iv, pp. 57-69.)

receive the same wages in all occupations. In Professor Clark's own words: '... perfect freedom of choice together with free training and the removal of occupational barriers will bring correct occupational distribution.'¹ The argument reaches its logical conclusion in another statement: 'If every one had free access to any amount of education, and in addition full information regarding all occupations, perhaps we could afford to do nothing about occupational distribution.'²

This latter statement gives rise to grave apprehension. It leaves the impression that the author lives in a world governed by the mechanism of economic laws expressed in quantitative terms, that his philosophy is that of economic determinism. We seem to be faced with an exaggerated 'economism' whose danger it is, in the words of Karl Mannheim, that by accepting one universal principle 'it will be easily led to cover up all the other factors, psychological, political, &c., or to interpret them in economic terms'.³ Our fears are not allayed if we are told by Professor Clark that 'it is indeed not inconceivable that the occupations which are most disagreeable might have to pay the highest wages'.⁴ In other words, if free rein be given to economic laws, if all occupational and educational barriers disappear, a physician might receive a lower income than a labourer who has to work on a railway line under the blazing sun of a mid-western summer. True, Professor Clark himself quotes L. D. Edie in saying that 'instead of leaving matters to blind fate or to automatic laws, we may well devote our energies to creative control of our destinies as labourers and as human beings'.⁵ He also suggests 'the setting up of some type of advisory planning bodies and possibly even of more official bodies'.⁶ A few paragraphs farther on, however, he defines the duties of such bodies in a way which to our mind would deprive them of much of their usefulness:

"The essential duties of the commission would be to secure the average and range of net earnings in all occupations. It is understood that these figures are to be based upon capitalized life earnings. This information within itself will probably be the main indicator of supply and demand; but in addition an index of the number of employed in each occupation should be published. Theoretically, all this information should be published daily. There is reason to think that a properly presented

¹ Op. cit., p. 162. ² Ibid., p. 146. ³ Karl Mannheim, op. cit., p. 143.

⁴ Harold F. Clark, op. cit., p. 142. ⁵ Ibid., p. 167. ⁶ Ibid., p. 162.

index of supply and demand and wages in occupations would appeal to as many people as do stock exchange prices.¹

It appears, therefore, that it is to be the main business of the planning commissions to publish—if possible daily—wage indices and statistical tables concerning demand and supply, in order to facilitate their mechanical adjustment, which reminds us of another statement of Karl Mannheim: "The over-emphasis on the mathematical and on what can be counted has gradually led to a point where certain sciences are no longer interested in what is worth knowing, but consider worth knowing only that which can be counted."²

Professor Clark's 'plan' is undoubtedly very attractive, with the promise it holds out of bringing about 'correct' occupational distribution. Yet, in order to avoid a false start in occupational planning, it is essential to point out that the chief assumptions underlying the plan need some modification. It will have to be shown that in general, but particularly as regards the professions, the choice of a career is not necessarily determined by economic principles, i.e. the hope for higher incomes. Furthermore, it will have to be proved that in so far as the motive of economic self-interest is one of the factors determining the choice of a career, its unfettered operation is likely to lead to results which would be highly undesirable. It would not lead to a 'correct' occupational distribution but to a disorganization of professional services.³

¹ Ibid.

² Karl Mannheim, *op. cit.*, p. 141.

³ Certain passages in Professor Clark's treatise lead one to believe that he himself recognizes certain limits to his 'economism'. The very fact that he has much to say about 'planning' indicates that he does not trust altogether to the automatic working-out of the economic principle, even where all educational and occupational barriers are removed. Thus, in speaking of the commission responsible for the 'planning', he states that it 'would be expert in the necessary technique and would be capable of making plans *and anticipating the needs of the social order*' (p. 164; italics mine, *Ed.*). This is obviously something different from recording and publishing indications on *existing* wages and the *actual* relation of demand and supply in the market for human labour. It may therefore be that we are separated from Professor Clark's line of reasoning by a difference in emphasis rather than substance. It is, however, this very difference in emphasis which may cause a wrong start in occupational planning and a loss of energy and time. Signs are not lacking, at least in America, that a great deal of time and energy may be spent on rather problematical attempts to secure figures on average and range of net earnings, where from the point of view of occupational planning more immediately useful data might be obtained through a much simpler analysis of unsatisfied or potential demands for the various types of human labour.

Contrary to the assumptions of economic determinists, the species man has an annoying way of not always conforming to economic type. Failing *panem* people will be satisfied with *circenses*, or they may even prefer the circus. The history of the Fascist movements since their inception shows only too clearly that large masses of people can be led into altogether uneconomic behaviour by an appeal to such ephemeral notions as 'national prestige' or 'heroic missions', or simply by the very concrete appeal exercised by marching bands. In more positive terms these movements have given an example to the world that the idea of service may be stronger than that of individual gain. Undoubtedly many young people in Germany have joined work-camps or the armed sections of the Nazi Party because there was nothing else for them to do; but there were many who gave up promising careers in a desire to serve what they believed to be the larger interests of their country, whether as soldiers or in some poorly paid party job.¹

Uneconomic behaviour is, however, by no means confined to the totalitarian countries. There is no need of elaborate statistical proof to show that the choice of an educational and with it an occupational career is subject to variations in fashion. The general and disproportionate increase in medical studies after the War, which cannot be altogether explained on economic grounds, is probably a case in point. Similarly, the enthusiasm for flying characteristic of modern Russian youth has in recent years resulted in a surplus of aviation engineers in the U.S.S.R. As a matter of fact the continuous growth in recent decades of student enrolments in general can be quoted as an example. Certainly the hope for larger incomes has played a very important role in swelling the number of college and university students. It must, however, not be forgotten that student enrolments continued to increase even at a time when educational authorities and professional organizations in such countries as Austria or Germany (before 1933) did their best to inform the public about the unemployment in the professions and the pitiful conditions prevailing amongst professional workers. These efforts met with little success, partly at least because these

¹ The fact that behind the clamour for 'national prestige' or the sacrifice for the 'common cause' may consciously or unconsciously lie the hope for a higher standard of living to be attained in the long run, does not detract from our contention that the behaviour of large masses of people in the Fascist countries is far from rational in any economic sense.

countries had become 'university-minded', because higher education had become fashionable.¹ No one will doubt that the element of fashion has also had a great deal to do with the expansion of higher education in the United States.

In considering uneconomic behaviour, account has to be taken also of those who choose their careers as a *vocatio* and not only an *occupatio*. To all intents and purposes they are within each occupational group the most valuable element, and at the same time the least likely to be determined by purely economic considerations. They will prepare themselves for their chosen career irrespective of questions of demand and supply, and of the wages or the income they are likely to earn. They will be motivated by the 'call' they feel to a particular type of work, and this does not mean that they must necessarily be peculiarly qualified for it. For our purposes it is important to realize that people are more likely to feel a call to some professional career, irrespective of economic considerations, than for the simple occupation of street-cleaning. To most people a glamour surrounds the work of the physician who heals the sick and treats the infirm, or that of the teacher who embodies learning and guidance, a glamour not found in the work of the crossing-sweeper. Therefore, if every one were freely admitted to prepare himself for any career to which he or she felt attracted, it is conceivable that certain professions or occupations might be swamped by new candidates who felt a call to them. In the light of what has been said about the preference of recently emancipated groups for teaching careers and of the enthusiasm for education in certain countries, it is possible, for instance, that the number of teachers might grow far beyond what might be considered 'occupationally correct'. It would not mean that there were too many exceptionally gifted teachers but too many teachers who thought that they ought to teach.

All this goes to show that economic motives, while undoubtedly very important for most people, are probably not strong enough to assure the success of any occupational 'plan' entirely or primarily based upon the assumption that the *homo economicus* was not only an exceedingly helpful invention of theoretical economists but the prototype of modern man.

¹ Warnings that a particular profession was overcrowded have at times led to considerable shifts in the distribution of students over the various faculties. At the same time, however, total enrolments continued to increase.

The second objection to such a 'plan' is, if anything, even more important. It arises out of the realization that whatever method of planning is adopted, it is certain that under a system of free, uncontrolled markets the differences in income-levels will persist both within the various occupational groups and particularly between them. The notion that 'the occupations which are most disagreeable might have to pay the highest wages' is founded neither in theory nor in fact. These differences, which will normally be in favour of the highly trained professional worker, may be considerably reduced but they cannot be altogether eliminated. A further consideration of the 'price mechanism' operative in the market for intellectual labour will facilitate the understanding of this phenomenon.

It has been stated that the price of professional services is not primarily determined by the quantity of available services, measured by counting the number of practitioners, but by the quality of the services rendered. To quote an example: the public in need of medical services does not measure its needs in terms of a fixed number of physicians devoting certain hours of their day to the care of suffering humanity. It expects of the physician a great deal of skill, assisted by a high degree of ability and a moral character which inspires every confidence. What is more, it is prepared to pay for these qualities and to pay more than it pays to the man who empties the dustbins. The greater the ability and the qualifications of the individual practitioner the more intense will be the demand for his services and the higher will be the price paid for them. In other words the ability and the moral standing of the practitioner become the essential factors determining the price of his or her work. Most people would agree with this line of reasoning. Some might counter, however, by saying that natural ability is not so scarce as to assure to those who possess it a position of monopoly. It is held that given the right type of education and environment very high standards of achievement might be attained by most people. We shall not venture on a discussion of what in the present state of human knowledge is a very debatable issue, for the simple reason that the argument is irrelevant. Whether or not the optimism of those who believe in the unlimited educability of man is justified, there can be no doubt that *exceptional* ability, given the right kind of education and environment, will go farther than ordinary ability. It is exactly this *exceptional* ability which is

sought after in the market for intellectual labour. Wherever it can be found it will be met by an exceptionally intense demand, even if the profession is overcrowded by people of average ability, which goes to show that there will always be in every profession a group of practitioners whose income will be substantially above that of their less able colleagues. To return to our dustman, it is obvious that the question of exceptional ability plays an altogether subordinate role, not because there are no particularly able dustmen but because the emptying of dustbins does not require exceptional gifts. The variations in wages paid to the humblest and the ablest of the dustmen will therefore be small.

These differences in the determination of prices, i.e. wages, for highly trained professional workers who are paid primarily according to their ability, and for the humble types of manual work where the quantity rather than the quality of the supply determines the wage, are of utmost importance in evaluating the practicability of any 'automatic' system of occupational distribution. Under such a system people who are only interested in the incomes they may earn will be attracted by the top salaries or incomes received in the professions. Given free access both to education, even of the highest type, and to the professions, they will do what they are supposed to do—seek an education leading to the professions. What next? A great many of the new recruits for the professions will end as educational failures; time and money will be lost. On the other hand, if those who believe in the practically unlimited educability of the human individual are correct, a very much larger number will attain their ends: they will become physicians and lawyers and college professors. No doubt some of them, owing to exceptional ability, will reach the top—in income and in social standing—thus inciting ever new people to prepare for the professions. The others of average ability or below will gradually see their incomes decrease, even if they find any one who desires their services. They may even become dustmen again, for the income derived from their professional practice may conceivably fall below that of the dustman. The vicious circle will be closed. The dustmen will certainly have recorded an increase in their income, but their top wages will still be scarcely higher than those of the least successful professional man. The top earnings in the professions may have decreased somewhat, but as they are not based on quantity but on quality they will still remain an incentive to enter

the professional careers—and not only the top earnings but also the average earnings, which, owing to the exceptionally high incomes of the few, will remain above the average earnings of the dustmen.

This is not merely juggling with words or theories. There are medical doctors and lawyers in Europe who in recent years have had to turn to all kinds of menial jobs in order to earn a living.¹ Their disappointment and resentment is in proportion to the energy and the capital they and their parents have wasted on highly specialized professional courses. More serious than the fate of these individuals is the danger which has been incurred by the professions. Physicians who, though admitted to the profession, could not cover their minimum needs by their honest earnings have had to resort to all kinds of unethical practices, from fee-splitting and the performance of illegal operations to the peddling of drugs. Lawyers have had to resort to shady practices in order to make both ends meet. The dangers to the public and to the professions, whose standards and standing both depend on the position of trust which they rightfully enjoy, needs no emphasis. As things are at present, these unfortunate cases are still comparatively infrequent: where they have become known the professions or other licensing agencies have acted promptly by withdrawing the right to practise. It can, however, easily be imagined what would happen if the fate of the professions and the supply of professional services were left to the benighted self-interest of the 'economic man'. The world would before long be faced with the existence of an intellectual proletariat, more formidable and more dangerous than anything it has known in the past.

There is one further objection to an occupational plan elaborated on the assumption that people will choose their careers on the basis of information on prevailing rates of income and the number of employed in each occupation. It is simply that this information is bound to be misleading. It will be the more misleading in pro-

¹ It is probably true that some of these men and women who were obliged to seek altogether inferior positions might have been able to earn their living within their own professions, had it not been for the fact that some of the poorer sections of the population could not afford the fees imposed by the professional organizations. No defence is intended of these practices. In some countries, however, such as Austria, the point has probably been reached where the total number of medical practitioners is in excess of those required to meet existing demands at reasonable fees.

portion to the time it takes to prepare for a given occupation. As the period of preparation for professional work is the longest of all, the practical value of any information on current rates of income in the professions is likely to be very problematical. The anxious father and his eager son might, after having studied the daily bulletin on wages and the number of gainfully employed people, decide that physicians drew the largest incomes and that Tom should therefore go to college and then to medical school. Yet eight or nine years later, when the new recruit to the medical profession was ready to begin practising, the situation in the medical profession might have radically changed. In the intervening years large numbers of medical students who had consulted the bulletin two or three years earlier might have reached educational maturity and have flooded the medical profession. Again, changes in the social and economic structure of society might in the meanwhile have created a keen demand for a type of professional service—for instance, experts in adult education—which at the time when Tom decided to become a physician was hardly in evidence. Thus neither the interests of the individual nor those of society would have been served by a choice of profession made on the basis of information on the present-day situation in the various occupations.

In spite of all these objections any defeatist attitude to the possibilities of occupational planning would not be warranted. To plan for a better if not to say 'correct' occupational distribution is certainly more difficult than is sometimes assumed, but it is not impossible.

OCCUPATIONAL OPPORTUNITIES IN A CHANGING SOCIETY

Planning means foreseeing, whether in a comparatively static society or in one which is undergoing rapid change. In the latter case planning becomes obviously more complicated and problematical. 'Automatic' laws, or what has been taken for them, may be found wanting as new elements appear and change society at a given moment of its history. Some of these changes may be foreseen, while others such as wars and their effects cannot be predicted with any accuracy. Yet the extent to which changes in the occupational field may be confidently anticipated is substantial enough to allow for planning by which people can be directed towards those occupations which are likely to offer them work.

The demands on the labour market are determined in the main by four things. *First*, the demand for the various types of workers, manual or intellectual, will depend on the degree of technological development any given country is likely to attain within the period required for training these workers. To each stage of technological development corresponds a demand for certain types of workers. A predominantly agricultural country needs different types from those required by a highly industrialized community. Besides, the relative strength of the various occupational groups will vary widely, e.g. the effective demand for professional services tends to be smaller in agricultural as compared with industrial countries.

Second, the types of labour in demand and the intensity of the demand will depend upon the material wealth of the country and its distribution. In a poverty-stricken country, or where the masses of the people live close to the subsistence level, the heaviest demand will be for the bare necessities of life, food above all, then clothes and shelter, and the demand for workers will be greatest in those occupational groups which produce these commodities in their simplest and cheapest form. In wealthier countries a larger proportion of the national income will be used to satisfy the demand for what were once thought of as luxury goods, including professional services.

Third, the labour market will be influenced—a matter which has been discussed before—by the evolution of social concepts resulting in new forms of social organization. The development of co-operative societies may dispossess a certain number of individual shopkeepers, but it is certain to create an increased demand for a new type of administrator. Similarly, the socialization of some of the professional services is likely to lead to an increased demand for professional workers, as more of the consumers will be able to avail themselves of these services.

Fourth, improving levels of education are likely to result in a greater demand for certain types of goods and services which at the lower levels of education were not appreciated. More fully developed educational facilities or better sanitation will be considered no longer as luxuries but as amongst the necessities of life.

Within limits the evolution of these factors is predictable. It is gradual and its direction visible to careful analysis. Thus a country may reveal a decided trend towards industrialization. Natural resources and a strong internal market may assure in-

creasing wealth. The growing complexity of national life and the existence of obvious needs which cannot be met under the simple forms of social organization are likely to produce new forms of social organization. And finally it is evident that unless there are revolutions or wars education, once it has become accessible to all, will engender a desire for more education.

Needless to say, the analysis of any one of these factors alone may lead to altogether inconclusive and even misleading results. It cannot be emphasized often enough that social phenomena cannot be explained in terms of one simple principle, however important it may be. An analysis of all the factors combined will not only help to eliminate important sources of error, but will throw a good deal of light upon the interdependence of the various elements. It will become evident that *grasso modo* each stage in the development of one corresponds to a certain stage in the evolution of the others. An agricultural country using primitive techniques is not likely to be encumbered by abundant wealth, its social organization is likely to be crude and its general educational level low. The wealth of a highly industrialized country in full possession of its markets is likely to be substantial, while the social organization will be highly complicated and will include a fully developed system of education. In other words certain constellations will be found to be typical. Once that point has been reached international comparisons come into their own. When it can be shown that the situation in one country has a strong resemblance to the situation which prevailed in another some ten or twenty years ago, the assumption is strong that the first country may have something to learn from the experience of the second, for instance as to the changes in occupational distribution that accompany the evolution from an agricultural to an industrial economy.

The lesson to be drawn will be all the more helpful if it is realized that history does not repeat itself, i.e. that the constellation of *all* the relevant factors is never the same. The industrialization of a country in the third decade of this century may meet with favouring circumstances or, on the other hand, with difficulties which did not exist in earlier days. The inventions made in the interval are at its disposal and the most modern machinery can be imported from abroad. On the other hand, competition for markets has become very much keener and international trade has become more complicated. Furthermore, it will be necessary to take into

account differences in national character and attitude which may hasten or retard the evolution.

Notwithstanding all these variations, and provided these are recognized and explored, the analysis of 'typical' constellations and their evolution constitutes an advance over the attempt to interpret concrete situations in terms of simple principles. From a pragmatic point of view they certainly offer more useful tools for creating the conditions which will lead to a better occupational distribution. Valuable indications will be gained as to the types of workers likely to be in demand and the relative importance of the various occupational groups.

A consideration of the present-day situation will show better than lengthy theoretical arguments what we have in mind. Roughly speaking we can discern three stages in the social and economic evolution by which the situation in the various countries can be characterized. Allan G. B. Fisher, who has paid special attention to the problems under consideration, speaks of a 'primary', 'secondary', and 'tertiary' producing stage.¹ In the primary producing stage agricultural and pastoral occupations are the most important. Large areas of the world are still in this stage. Yet, apart from certain regions of China, India, and Africa, most of these areas show a strong tendency to emerge into the second stage, the stage of manufacturing and industrial production. Even where they are not creating their own industry, they avail themselves to a greater or lesser extent of the products of the industrial stage. The use of steam, electricity, and of motorized implements is spreading, and this creates new occupations and new occupational demands even where the primarily agricultural character of the countries is preserved. Many countries of eastern and south-eastern Europe have reached this intermediate stage.

In the secondary or industrial stage the occupational distribution changes considerably. Not only is there a smaller demand for people working on the land and a larger demand for industrial workers, but even within the industrial areas the character and relative importance of the various occupational groups is subject to change. For large sections of workers mobility (adaptability) becomes more important than skill. The degree of skill required

¹ Allan G. B. Fisher, *The Clash of Progress and Security*, London, 1935, *passim*, particularly pp. 25 ff.

to work in a motor factory or even to work a telephone-exchange or an elevator can be acquired in a very short time. On the other hand occupational changes become very frequent as new inventions or changes in fashions lead to new methods of production or create new industries while others decay. At the same time such occupational groups as managers, commercial and technical experts, increase in numbers and in importance. The demand for professional services becomes also more intense.

The tertiary stage is so closely tied up with the evolution of the secondary that it is commonly not recognized as a separate stage. It is the stage where, with growing material progress, new demands for goods or services become evident, or rather where the demand for the 'good things of life', hitherto largely reserved for the wealthy few, becomes more general. An increasing demand makes itself felt for 'facilities for travel, amusements of various kinds, governmental and other personal and intangible services, flowers, music, art, literature, education, science, philosophy, and the like'.¹ Again, if any conclusion can be drawn from what the well-to-do buy to-day, there is likely to be a recrudescence of demand for the work of highly skilled craftsmen, which cannot be produced serially. In terms of occupational distribution this means that relatively speaking the number of persons engaged in agriculture will remain stationary or show a further decline owing to the introduction of new farm machinery, that the number of persons occupied in industry is also likely to decline owing to the further mechanization of industrial processes (unless, of course, new industries develop), and that there will be a further substantial increase in the number of people in the professions, in the higher service occupations, and in all those occupations which require a large measure of creative ability and skill.

It may be objected that, even when a clear understanding has been reached of the stage of evolution attained by any particular country, we shall be kept wondering in what numerical proportions the young should be trained for the different occupational groups. This objection is neither so important nor so difficult to meet as appears at first sight.

First, it must be realized that enormous progress could be achieved if obvious maladjustments could be corrected, if—to revert to an example given before—the schools in those countries

¹ Allan G. B. Fisher, *op. cit.*, p. 28.

which are just emerging from the primitive agricultural stage would put their emphasis on the training of technicians rather than on producing ever more professional men, for whom at that stage there is comparatively little demand. Society would also benefit if in the highly industrialized countries emerging into the 'tertiary' stage more stress were laid on re-creating crafts, which in some of these countries have been practically forgotten during the process of rapid industrialization. For instance, it is significant that the United States with their astronomical unemployment figures have for some time been threatened with a shortage in the supply of highly trained craftsmen and skilled workers. A mass of evidence corroborating this statement is available. We shall only quote a paragraph which appeared recently in *Occupations*:

'Over fourteen times as many men are in training for the professions as are needed, but only one-seventh of the number needed are being trained to replace the shrinking ranks of the skilled, according to a statement by R. V. Billington, U.S. Agent of Trade and Industrial Education, quoted in the Spring issue of *Trained Men*. The ratio of apprentices in training has decreased since 1920, until now it is only one to 443 skilled workers; and the majority of skilled workers are over 50 years of age. This same issue lists seven reasons for "the oncoming shortage of skilled workers" quoted from the magazine, *Steel*. These are the tendency to specialize, unstable employment, demands of new industries, restricted immigration, high production equipment, supervisory demands, and changing requirements of skill. Working forces have been "skinned down to bare necessities" with no apprentices in training to fill the gaps caused by death and shifts in personnel.'

In view of the fact that many of the 'skilled workers' above 50 will have to be replaced before long, and that with a growing appreciation of individual work there is likely to be a greater demand for first-rate cabinet-makers, interior decorators, and the like, it is obvious that more attention will have to be paid to supplying this type of worker. In order to correct such obvious maladjustments it is sufficient to arrive at workable estimates of needed numbers by a careful analysis of existing needs and the direction in which they evolve. Such estimates will be far from 'exact', but they will

¹ 'Wanted—Skilled Workers', in *Occupations*, Jan. 1936, p. 363. This statement is quoted because it clearly brings out the need for a certain type of worker, and not because of the numerical estimates it contains. The assertion that 'over fourteen times as many men are in training for the professions as are needed' seems to us to be altogether unwarranted.

point the way in which changes in occupational distribution can be expected.

The second point to be remembered is that in the second and third stages of evolution—the industrial and the super-industrial state—large masses of people need adaptability rather than skill. They form the large army of workers in industry, the lower service occupations, and to a lesser extent in agriculture who, owing to changes of industrial processes and the rise and fall of particular industries or enterprises, may have to change their jobs frequently. They are not expected to be all-round technicians, but simply to be able to fulfil some small function within the highly differentiated processes of work.¹ It is, therefore, more or less immaterial what kind of occupational skill they acquire through their training, so long as they receive the kind of education which will condition them for life in an industrial society and which will create in them the right attitude to change. They must be made adaptable and ready to change one occupation for another. Considering that the problem of vocational education is of only secondary importance for this vast army of workers, the question of 'exact' numbers does not arise in their case.

The third point concerns the professions, i.e. all those occupations which tend to require a prolonged and highly specialized training in institutions of higher learning. In their case the question of numbers is, of course, of greater importance. Professional men and women, whose period of training ranges from three to eight years, cannot be expected to change easily from one occupation to another. In any case, such a change nearly always involves loss of standing or a waste of capital and energy spent on the preparation for work in a particular profession. Changes should therefore be avoided as far as possible, which means that no more people should be trained for a particular profession than are reasonably certain to be absorbed. Fortunately the professional group is the one group whose needs for new candidates may be predicted with some measure of accuracy. Some of the professions may be more 'vulnerable' in times of depression, owing to the fact that the demand for professional services is elastic; but by and

¹ The late General R. J. Rees of the American Telephone and Telegraph Co. in New York, whose practical experience of work-requirements in America was second to none, suggested in an interview with the author in 1934 that 80 per cent. of the gainfully employed people in America could acquire the requisite skill within a period ranging from six weeks to one year.

large—and seen over a long period—the numerical increase of those employed in the professions is steady enough. Professional men are not likely to be displaced in large numbers by new inventions, as they depend only to a small extent on their tools—it is the individual human effort which counts. Nor is it likely that the demand for professional services will suddenly increase in such a way as to upset all calculations. A country with fifty thousand physicians is not likely to require all of a sudden (i.e. within six or seven years—the time it needs to train a physician) seventy or eighty thousand, nor is the demand likely to decrease substantially during the same period. We shall not enlarge on the methods by which future demands may be estimated. Throughout this report we have either used them ourselves or referred to their use by such groups as the Limburg Commission, the Swedish experts, the former Volkswirtschaftliche Zentralstelle,¹ and others.²

All this goes to show that 'planning' for a better occupational distribution is not beyond the reach of human intelligence. Where it is impossible to arrive at close estimates of future demands it is at least feasible to ascertain occupational trends inherent in the evolution of society—trends which, if prolonged into the future, will give an idea of coming needs in the occupational field. It thus becomes possible to work towards a better adjustment of supply and demand.

ORGANS OF PLANNING

When discussing the possibilities of professional guidance and particularly the Swedish proposal for the setting up of a National Professional Orientation Committee in that country, it was pointed

¹ A detailed account of the methods employed by the Zentralstelle can be found in an article by Dr. G. Keiser, 'Der Kampf gegen die Überfüllung der Hochschulen und der akademischen Berufe mit wissenschaftlichen Methoden', in *Ärztliche Mitteilungen*, vol. xxxiii, no. 39, Leipzig, 1932, pp. 809-13.

² In order to avoid confusion it should be emphasized that if we talk of the prediction of future needs we have in mind the actual demand likely to be effective at the time for which the estimate is made. These estimates will in most cases be distinct from estimates of 'optimum numbers'. It will be remembered that the Committee on the Costs of Medical Care in the United States (see p. 150) attempted to estimate the 'optimum number' of physicians required in the United States, to provide for all Americans all the medical care deemed necessary according to present standards. Such estimates may be misleading if they are used as a basis for predicting effective demands a few years hence. Their function is rather to help stimulate a demand which has not yet become effective and to pave the way for such measures as medical insurance, which will bring the needed services within the financial reach of those who for the moment have to go without them.

out that any such committee should not confine itself to observing the market for intellectual work, but should extend its scope to the observation of occupational prospects in all walks of life. The reason given at the time was that only in this way would it be in a position to help towards a better distribution of prospective workers throughout the occupational field: 'Vocational guidance and orientation, in order to reach the maximum of usefulness, must attempt not only to achieve better distribution of professional workers throughout the learned professions, it must not only deter people from starting professional courses, but it must point the way to those types of work, manual or otherwise, which society needs and for which it is prepared to pay.'¹

In the light of all that has gone before, an even more cogent reason appears why the work of any 'planning' or rather 'research' body should not be confined to the professional field. If it is true that each stage in the evolution of society has its particular occupational pattern, it is obvious that any maladjustment in one occupational group will influence the situation in all the others. It is conceivable, for instance, that the demand for professional services may decline because no efforts are made to transfer a surplus of agricultural labour or of labour engaged in decaying industries to new occupations likely to flourish in the 'tertiary' stage of economic evolution. Any such maladjustment, if very marked, would result in a considerable increase of unemployment—as it is one of the causes of unemployment at present—which in turn would decrease the demand for professional services. Or such a maladjustment may simply prevent any rise in the standard of living and therefore any increase in the demand for professional services which otherwise might be anticipated.

All organizations entrusted with the observation of occupational prospects in a given country should therefore work in the closest possible co-operation with each other. Where a country creates one special organization for the purpose, that organization should concern itself with the entire occupational field and not confine itself to the professions. It is the weakness of most of the central organizations, such as the Bureau Universitaire de Statistique in France, and of many of the national inquiries mentioned in these pages, that they attempt to predict professional prospects without sufficient reference either to needs in other fields or to the fact that

¹ See p. 256.

all occupational needs depend upon the degree of development reached by a given society.

As regards the composition of any National Occupational Orientation Committee we need not go beyond what we stated when discussing the Swedish proposal. Such a committee, if strengthened by the collaboration of outstanding economists and social scientists, would render invaluable services. Its functions would of course be purely advisory.

In addition to the work done by the national agencies, it is desirable that some international body should serve as a clearing centre for the experiences of various countries. It should collect information on the methods of 'planning' evolved by the national agencies, and publish that information from time to time together with the essential results attained by these methods. The work of the International Student Service has proved conclusively how much an international agency of this kind can do to stimulate national efforts. The various conferences it has held, which have brought together experts from many lands, have furthermore undoubtedly helped to improve existing methods of predicting occupational opportunities in the professions. It is encouraging to note that both the International Labour Office and the International Institute of Intellectual Co-operation, which have supported these efforts, consider pursuing them on a larger scale. The International Committee on Intellectual Co-operation, in its 1936 session, commended the steps already taken by the Institute of Intellectual Co-operation in Paris to obtain information on the unemployment in the professions and the ways of meeting it, and asked that these efforts be continued. After recommending that the greatest possible number of countries should form 'university information and intelligence bureaux', it decided that 'the results of the permanent inquiry which might be set on foot and conducted by the Institute with the assistance of the International Labour Office, the Joint Committee of the Major Associations, the International Student Organizations, and the National Committees on Intellectual Co-operation might be published in the bulletin *La Coopération intellectuelle*, in order to provide documentary material which could be consulted by all parties concerned'.¹ These

¹ International Committee on Intellectual Co-operation, *Report of the Committee on the Work of its Eighteenth Session*, League of Nations Document No. C. 328. M. 205. 1936. XII; Geneva, Aug. 1936, pp. 16-17.

proposals are admirable as far as they go. Their weakness lies obviously in the fact that they refer only to professional workers, and do not recognize the necessity of extending the observations of any central agency to the entire labour market. It is to be hoped that, thanks to the collaboration of the International Labour Office, this weakness will gradually be overcome.

In conclusion, it hardly needs re-emphasizing that any efforts to prepare for a better occupational distribution will have to be sustained and continuous. Important sections of such remarkable documents as the Limburg or the Wicksell Report will be out of date before long. Society does not stand still, and as it evolves new occupational problems arise, and the problems of occupational distribution present themselves under an ever new light. Any 'planning' agencies will therefore have to be permanent and their work continuous.

AIDS AND OBSTACLES TO 'CORRECT' OCCUPATIONAL DISTRIBUTION

Occupational planning is only a part of economic and social planning in general. To discuss the more general aspects of economic planning is clearly outside the scope of this study. We shall confine ourselves to emphasizing certain aspects of general economic planning which have a direct bearing upon occupational distribution, and which for that reason need to be kept in mind by those who may be entrusted with the delicate task of predicting future demands on labour.

The first point to be raised is that any transfer of labour from one occupational group to another implies also the transfer of capital, though not necessarily in the same proportions. Capital will have to be withdrawn from declining industries to be invested in new enterprises. A resistance on the part of capitalists to effect these transfers is bound to retard the transfer of labour or to make it altogether impossible. That such resistance exists, and that it is largely due to the modern capitalist's fear of the initial losses inherent in the transfer of capital from one industry to another, as well as to his preference for a problematical 'security' as against a risky gain, has been amply demonstrated by Allan Fisher in his *Clash of Progress and Security*, the most profound recent publication on the subject which has come to our notice. The point is important because it is one of the main factors determining the rate

at which any country is likely to evolve economically, and this in turn determines the rate at which occupational distribution will change or ought to be changed. For this reason it is evident that in estimating future needs on the labour market close attention will have to be paid to this phenomenon. It is also to be anticipated that the agencies evaluating future prospects may help to overcome some of the resistance on the part of the private capitalist by pointing the way to fields in which both labour and capital may be gainfully employed.

Another line of reasoning takes us back to a subject which has been discussed in some detail before. The future ratio of demand to supply in the labour market will depend on the organization of that market and the possible restrictions which may be imposed upon it. Such measures as the prohibition of multiple employment or the lowering of the retiring age will artificially but effectively reduce the supply of human labour. On the other hand the organization of the demand—for instance, co-operative health services on the land—will result in an increase of effective demand, at least in some sections of the market. In the same order of ideas mention must be made of all those measures which tend to improve working conditions in general and particularly to reduce working hours. No special reference has yet been made to these measures, as they have in the past primarily affected the rank and file of human labour. It is evident, however, that any effective attempts to end the exploitation of professional workers, who often have to work overtime in order to make both ends meet, would considerably improve professional prospects for new candidates.

The particular interest of all these measures from the point of view of occupational planning lies in the fact that they not only help to relieve acute unemployment situations but also tend to avoid too abrupt changes in the occupational pattern. Where there is an evident surplus of labour, or where such is to be expected owing to the large number of people intending to enter a particular occupation, there are two ways of dealing with it. One is the way of transfer, i.e. those who cannot find employment in one occupation have to be transferred to other occupations in which there are better prospects. The other way is to reduce artificially the existing supply of workers in the various occupational groups (elimination of those who have reached a certain age, of foreigners, &c.) or to

reduce the volume of their work (shorter hours). Any prediction as to the types of workers likely to be in demand will depend on which of these two ways is taken. If the way of transfer is chosen the task of the occupational planning agencies obviously becomes more difficult. The emphasis will be on estimating 'additional' demands, always more difficult to ascertain than the demand due to need for replacement, and on the exploration and discovery of new occupations, which as they evolve will substantially change the occupational distribution. Restrictive measures, on the other hand, are likely to result in a more static situation, during which the demand due to the need for replacement will be relatively more important than the possible 'additional' demand.

For practical purposes it has to be realized, of course, that the two methods of stabilizing the labour market, far from excluding each other, are likely to go hand in hand. Restrictive measures, while certainly desirable and temporarily effective, are themselves bound to result in the long run in important shifts in the occupational distribution. The introduction of shorter hours, while maintaining at the same time the former level of wages or even raising it, will assure to a larger number of people more leisure and the means to enjoy it. The demand for 'tertiary' products, for personal and professional services, will go up and new opportunities for work will thus be created.

Occupational planning as here conceived is no easy matter. If it is ever to become more than sheer guesswork or a utopian dream it will require vastly improved educational and occupational statistics. It will have to make the fullest possible use of whatever tools economic theory may supply. Indices of prices and wages, of production and consumption will have to be consulted. National attitudes and the evolution of social organization will have to be observed. Above all creative spirits will be needed, men who can separate the important from the ephemeral, experts certainly, but also social philosophers. They will need vision and initiative. They will also need patience, for much of their work will be vitiated by forces beyond men's ken or control. Yet, while they will not re-create society nor usher in the millennium, their findings will facilitate the peaceful evolution of society. It will be the duty of government agencies, of trade unions and private capitalists, of parliamentary bodies and educators to heed their advice and to

make adjustments where adjustments appear desirable. By the application of reason and intelligence to problems which are to a large extent within the reach of human understanding, a bulwark will be created against those who seek salvation in abdicating reason and in resorting to force as the *ultima ratio*.

XI

EDUCATION IN TERMS OF SOCIAL AND ECONOMIC NEEDS

IN discussing 'educational planning' it should be clearly understood from the outset that we shall not concern ourselves with any specific changes in educational organization or in the methods of teaching which might be deemed desirable in any particular country to adjust the schools to social and economic needs. Each national genius creates its own schools, and no amount of educational planning will give England, for example, the kind of highly centralized educational system, with emphasis on the training of the intellect rather than of character, which is the pride of the French. Any adjustments which may be necessary will have to be planned and made nationally and in forms appropriate to each country. All that can be attempted from an international point of view is to state a few broad principles and to indicate on what general lines educational planning might proceed in order to bring about a better occupational distribution. We have sketched in the previous chapter some of the main stages in social and economic evolution; the time has now come to indicate how to adapt educational institutions and their teaching to these various stages. We shall have to be content with a very general outline, the composition of a general 'theme', to use the language of music. The variations on that theme will have to be written by those who are steeped in the fullness of national life. It is obvious that in our conclusions we shall have to deal not only with higher education but with education of all grades and types. For education like peace is indivisible.

PROBLEMS OF EDUCATIONAL PLANNING

As a prelude to educational planning it must be restated boldly and unequivocally that there can never be too much education and that any restrictive measures are a counsel of despair. It is too easily forgotten by those who oppose every expansion of educational facilities, or who advocate restricting the number of students in secondary schools and in the colleges and universities, that education does not only prepare people for work. It serves the advance of knowledge and understanding, it enriches the life of

the individual, it creates the general conditions on which social and economic progress depend. In so far as education serves these general purposes, no restrictions can be justified that debar able young people from any type of school, including the institutions of higher learning.

For the purposes of this study the social and economic aspects of such general education, though only by-products of the spread of knowledge and understanding, are particularly relevant. Some of them need no further emphasis. It is evident that a country of illiterates is likely to be retarded in its economic development, and that it will adhere to obsolete forms of social organization which are in the interest neither of the individual nor of the community as a whole. To take a concrete example, extreme forms of poverty will prevail amongst the masses in India as long as the overwhelming majority of the Indian people are able neither to read nor write. The solution of the communal problem, as well as the problem of self-government in general, depends also to a large extent on educating the masses.

Again, while India needs more primary schools, the highly developed democratic countries of the West will have to strengthen their systems of secondary and higher education if they are to survive. Intelligent citizenship cannot be acquired in primary schools alone. No one at the age of 13 or 14 can be expected to understand—even in their broadest outlines—the political principles which govern his country or to get an adequate idea of the forces which mould it. Yet such understanding is exactly what is expected of the average voter. As long as he lacks it he will remain a public menace, for he is likely at any time to fall a victim to the passionate though unreasonable appeals of irresponsible demagogues or of well-meaning but ignorant visionaries. It is for the schools beyond the primary grades to lay the foundations on which an intelligent democracy can be built. It is a task which with the increasing complexity of the modern state becomes ever more difficult. Thus for modern democracies it would seem that the secondary school stands in most need of development.¹ The need is not so obvious in the totalitarian countries, because with anti-democratic notions goes a disbelief in the educability of man as a

¹ See *Education for Citizenship in Secondary Schools*, London, 1936; particularly Part I, 'The Aims and Theory of Education for Citizenship', pp. 1-40, with articles by Sir Ernest Simon and Eva M. Hubback.

self-governing responsible being, a view which will clearly militate against the extension of the higher forms of education.¹

But if arguments regarding the political value of general education apply only to a limited number of countries in the modern world, the same is not true of arguments in the social and cultural field. Nations do not hold together only by virtue of the particular form of government with which they are endowed, nor can they be held together indefinitely by fear and hatred of their neighbours; they are strong because of the common bond of cultural traditions and values which unites them. Sir Percy Nunn in an admirable address to the Eastbourne Conference on Examinations conceived culture 'not as something reserved for exceptional persons, and therefore as something which alienates a man from the mass of his fellows, but as something which unites men because it is universal'.² Where large sections of the population are kept ignorant or are not enabled to acquire more than the most primitive elements of knowledge, as was the case in Russia before the Revolution, that bond will obviously be weak. The clash of economic interests which may separate the masses will in such a case not be mitigated by a common interest in cultural values. The intelligentsia will live in a class by itself, out of touch with the masses, whose language it does not understand, unable to serve as a mediator when social and economic conflicts arise. Worse than that, a share in intellectual and cultural attainments will be identified with economic and social privilege, with the result that when revolution gets under way the fury of those in revolt will turn against valuable cultural traditions as much as against unjustified privileges. In other words, educational inequality does not only help to create a most precarious state of social instability but may lead to a destruction of cultural values which it has taken centuries to evolve.

Similar considerations show that general education, freely available to the masses, may become also an important safeguard for international peace. The fully educated man is less likely to resort to force as the supreme argument. Education can, however, only be fully effective in this field if culture is indeed conceived as

¹ This is obviously not the place to enter into a discussion of the relative value of democratic or totalitarian régimes. Those who believe in the superior worth of democratic forms of government will view with dismay the lowering of general educational levels in a number of European countries.

² *Conference on Examinations*, loc. cit., p. 241.

something universal, i.e. if education through the instrumentality of philosophy and religion penetrates to the fundamental elements which constitute the dignity of man. For example, where it is recognized that to search for truth is amongst the first prerogatives of mankind, people of different nations will have at once a basis and a motive for collaborating with one another. Where on the other hand 'education' confines itself to indoctrinating the young with nationalist or other political slogans and theories which do not stand the test of scientific investigation, international misunderstanding and strife are likely to result. That type of indoctrination is, of course, only fully successful amongst half-educated people or those whose education is altogether one-sided. It is significant that nationalists *à l'outrance* are nearly always opposed to the extension of general education and particularly of the higher types of educational facilities.

None of these observations are new. They express altogether trite thoughts, which nevertheless have to be re-emphasized at a time when the overcrowding of some professions is taken as a pretext to clamour for educational restrictions of every kind. The danger is very real that in an attempt to cure a specific evil by inadequate means, the cause of civilization and human progress in general may suffer. The agitation for educational restrictions is all the more regrettable, as it has been made abundantly clear in previous sections that the professions are amongst the first to benefit from social and material progress. Such progress will be most marked in a society which is at peace with itself and the outside world. General education, in helping to preserve that peace and thus furthering social and material progress, will bring professional services within the reach of the many. It will do more. It will lead to a fuller appreciation of the finer things of life and thus stimulate dormant desires for the services which only the professional man can render.

The general principle, then, is clear: any rigid curtailment of educational facilities is pernicious to society and contrary to the interest of the professions.

It will be objected that the great extension of educational facilities during this 'century of education' has not led to either social or international peace, and that people seem to understand even less than before the world within which they are moving. It has to be admitted that education seems to have made little difference

to the course taken by world events. Sterile criticism is cheap. The more constructive way of approaching the problem is to ask whether the apparent failure of education is not due to the fact that education as offered to increasing masses of people has been ill adapted to the needs of the different national communities. Looking at the problem in this way, one has to inquire whether the type of classical education offered in the secondary schools in the outlying corners of Europe, or the English education offered in the secondary schools of India, have helped the boys and girls of these countries to gain a better understanding of the world in which they live, or whether these types of general education have simply estranged them from their surroundings. One must also ask whether the dozens of courses, vocational and cultural, offered in some of the high schools or even colleges of the United States, have enabled their students to differentiate between what is important and what is unimportant, to understand, and not merely to assemble a conglomeration of disparate knowledge. The root of the difficulty, therefore, is not to be found in the rapid expansion of educational facilities but in the doubtful validity of much of the education given.

In the field of vocational education, or education for work, the need for adjustment is even more imperative, as we have maintained all along. In so far as the schools of all grades educate for definite occupations and careers, within which there is a limited demand for new candidates, it is evident that they should not only produce competent workers but that there should be some relation between the number of candidates trained and the probable demand. Yet the schools continue in more than one country to produce too many physicians and lawyers, while they fail to produce an adequate number of candidates for other careers (e.g. intermediary technical careers in some of the Balkan countries). Or they may produce people trained in all kinds of skills or highly educated in various subjects, who yet lack essential qualifications for their work.

Some quotations from contemporary American literature will serve to illustrate this latter point. Harry Woodburn Chase, Chancellor of New York University, after pointing out that engineering schools used to put too much stress on vocational training, comes to the conclusion that 'we need stress on fundamentals, and above all, we need stress on the attempt to make students more

intelligently able to understand and to adapt themselves to the demands of contemporary life'.¹ R. J. Rees is more specific in stating his requirements for potential industrial leaders:

'Science and engineering have solved the problem of production, but our economic order has found itself swamped rather than saved by the efficiency of the machine age. . . . The problems facing the college man in business have to do with human relationships. Education must equip the potential industrial leader with a fundamental knowledge of biology, psychology, sociology, economics, and the humanities.'²

Somewhat similar problems may confront the secondary schools. Mr. Frank D. Jewett, speaking as vice-president of the American Telephone and Telegraph Company to the members of the Department of Superintendence, stated in 1930:

'We have relatively little use for detail technique acquired at the expense of more fundamental mind training. Business itself is quite competent to provide the details of training in the technique of its operations. True, it may be of some help to us in some directions to have boys and girls enter our ranks with a rudimentary knowledge of certain kinds of technique. . . . We do quarrel with you if you carry this kind of training too far in amount of diversity and so deprive your product of the capacity to advance in after-life for lack of suitable training of the mind, which you of the secondary schools have alone to give.'³

There can thus be no doubt about the need to adjust education of every type more nearly to the requirements of a changing society. In the words of I. L. Kandel, the task to be met is two-fold: 'first, to redefine the concept of liberal education in terms more appropriate for the world in which we live, and, second, to provide appropriate types of education for the increasing numbers who are entering on some form of post-primary education and proceeding beyond that stage.'⁴ The first task is obvious—it is implied in the definition itself that any such redefinition of the meaning of educa-

¹ Harry Woodburn Chase, 'The Role of Educational Institutions', in *School and Society*, vol. xliii, no. 1120, June 13, 1936.

² Quoted from Walton C. John, 'College and University Education', in *Biennial Survey of Education, 1928-30*, vol. i, chap. xiii, p. 499. Dr. John himself carries the argument one step farther in saying: 'This emphasis on purpose, interpretation, and synthesis points to a return to higher educational objectives which are more "formal" in character. Perhaps the pendulum is beginning to swing away somewhat from the objectives of "content and vocation"' (ibid.).

³ *School and Society*, vol. xxxi, p. 419, March 29, 1930 (quoted from I. L. Kandel, *History of Secondary Education*, p. 538).

⁴ I. L. Kandel, *Examinations and their Substitutes in the United States*, loc. cit., p. 152.

tion can only be made in terms of the particular national climate under which a system of education is to function. In the past the term 'liberal education' has been applied largely to that education in the classical traditions which used to be the privilege of a selected minority. It was admirable in those countries of western Europe which have their roots deep down in the traditions of Greece and Rome. The same education forced upon Indian schools or upon the masses of high-school students in America, who may not have the special aptitudes required by this type of education, may mean little or nothing. We are here confronted with one of the problems of which we have said that adjustments have to be made nationally and in forms appropriate to each country. We come back to this issue in our final pages only in so far as it is essential to emphasize that the general attitudes cultivated by the schools may have a direct bearing upon the problem of occupational distribution and the creation of new demands for professional workers.

The second task—the provision of appropriate types of education for the increasing numbers who are entering on some form of post-primary education and proceeding beyond that stage—has to be envisaged under two headings: first, individual aptitudes, and second, social needs (occupational requirements). With the growing number of students in post-primary institutions, which used to be reserved for a selected minority (and still are, of course, in some countries), the range of differences in individual aptitudes increases. This in turn necessitates a greater differentiation in the programme of education. In many cases it may mean new types of schools. New types of schools or a new emphasis in educational programmes are, however, also necessary in order to meet the occupational needs of society—the schools are expected to produce the type of workers whose services are needed and for which society is prepared to pay.

We do not propose to enter upon a discussion of the changes which become desirable as with increasing numbers the range of differences in individual aptitudes widens. At this point our own study touches very closely upon the remarkable work accomplished by the International Examinations Inquiry, to which we have drawn attention.¹ It would be presumptuous on our part to add to the findings reached in the course of that Inquiry.

¹ See pp. 181 ff.; also I. L. Kandel's findings in *Examinations and their Substitutes*, which deal most directly with the issues raised in this volume.

All that remains for us, therefore, by way of summary and conclusion, is to attempt a broad description of the types of educational programmes most likely to satisfy the occupational needs of society in the various stages of social and economic evolution.

CHANGING EDUCATIONAL PROGRAMMES

In the attempt to obtain an approximate idea of occupational needs in the various types of society, we have described three stages of economic and social evolution: the pastoral and agricultural stage with its village civilization; the stage of advanced agriculture and the growth of industry; and finally, the 'tertiary' stage, with its advanced division of labour, standardization of industrial processes, more time for leisure, and growing demand for personal and professional services. In analysing the educational programmes best suited to each of these stages, it will be found convenient to treat primary, secondary, and higher education separately, as they do not stand in the same need of adjustment as society evolves.

(a) Primary education

There is little need for adaptation in the primary school. It is at all times and in all countries the essential task of primary schools to give a grounding in the three R's. At the same time it is true that in primitive countries or districts primary schools ought to hold a more important place than either secondary schools or institutions of higher learning. Reference has been made repeatedly to the need for more primary education in the rural districts of India. The example of Japan proves conclusively how much can be achieved within a short time in the way of advancing national prosperity, where every effort is made to develop first of all primary schools for all the people. The Emperor Meiji's reform of 1868 resulted in a concerted effort to end illiteracy. The development of secondary schools on a large scale and open to the masses came very much later, while the rapid expansion of the institutions of higher learning set in only during the World War and found its consummation under the Hara Cabinet after the War. Up till then the universities had been open to few, and therefore produced a limited number of graduates in keeping with the relatively small demand for their services.

What is furthermore essential is that in the primitive stage

primary schools should be adapted to the simple needs of the villagers. Through the primary schools a better understanding of the rural surroundings has to be attained, the pupils have to learn to penetrate and master the problems of village life. They have to be taught how to improve conditions of hygiene as well as the methods of hereditary vocations. This point has been clearly stated in the Sapru Report:

'In our opinion, while it should be the aim of primary education to remove illiteracy, it should also be its principal aim to qualify boys to become better agriculturalists and more useful members of village communities. Primary education, as it is given at present, is ineffective partly because it does not lay sufficient emphasis upon rural and agricultural needs and partly because the age-limit is too low.'¹

Where the primary schools are not adjusted to rural needs, or where they are not allowed sufficient time to attain their objective, the danger will be very real that the young will be weaned away from the villages and that they will seek further education in secondary schools. If these schools, which will largely be found in the urban agglomerations, put their main emphasis on a literary education the young will be still farther removed from their home surroundings. Before long those who are able to pass the requisite examinations will present themselves at the doors of the university. The villages will be deprived of the educated talent they need, while the intellectual proletariat in the cities will grow.²

There is no need to enlarge further on this first stage, as there are few parts of the world which still find themselves in the primitive stage. The agricultural countries of eastern and south-eastern Europe, most of South America, large parts of India, and even certain sections of China are already emerging into a mechanical civilization. At this intermediary stage as well as at the industrial and super-industrial stages the primary schools will change but little. They will continue to teach the young how to read and

¹ Sapru Report, pp. 188-9.

² In the light of our reiterated emphasis on the multiple elements which make up a particular society and its problems, it goes without saying that an extension of primary education in a country like India will not by itself end the precarious situation of the masses or the overcrowding in certain professions. All the reports from India stress the need for a revival and reorganization of the economic life in the villages. It is suggested, however, that such a revival depends upon the extension and improvement of primary schools.

write and perform simple arithmetical operations. There will be this difference, however, that a larger number of their children will proceed to secondary school, particularly at the super-industrial stage, with the result that the primary schools may have to emphasize somewhat more the 'literary' side of their training at the cost of the more vocational bias towards agriculture found in the first stage. This will of course be more true of the schools in the town than on the land. Whether on the land or in the city it will be essential for them to fit the children for life in a mechanical society.

(b) Secondary education

While little adaptation may be required in the primary schools as society advances to new types of civilization, it is different in the secondary schools. These, covering from the fifth or seventh grade up to the twelfth, depend for their usefulness largely upon adaptation to the technological stage of the society in which they find themselves.

In a primitive society, in which the training of the artisan, the farmer, and the tradesman is largely left to the workshop, the farm, and the retail shop, the secondary schools can afford to confine themselves largely to the kind of teaching which prepares for higher education and that alone. Provided the primary schools are successful in discharging their duty and fitting their pupils for work in the villages, there will not be too many candidates for the secondary schools. They will serve a selected minority able to benefit by a literary education in the traditional sense. In preparing their pupils for the institutions of higher learning, good care will however be taken not to estrange them from their original surroundings. Every effort will have to be made to keep the needs of the rural districts before them, to condition them or to keep them in condition for work in the villages, so that as teachers, physicians, or administrators they may be able to serve the community from which they come.¹ Above all, the need for more and better teachers will have to be emphasized. It is significant that all the reports from India stress this point.

¹ This psychological preparation will obviously have to be supplemented by measures likely to render the demand for professional services more effective. They have been described before, when we spoke of the means of stimulating and satisfying potential and extra-marginal demands (pp. 266-75).

As the primitive countries advance and avail themselves of improved means of communication, of steam and electricity, of the machine in agriculture and for the production of industrial goods, new vocations come into existence. Expert electricians and technicians of all kinds are wanted. Business and banking require experts in new techniques. It is found that from two to four years or more of intensive training are necessary to acquire the requisite knowledge and skill for the new occupations. This long period of training is necessary, for two reasons. First, in the early stages of industrialization there is little division of labour. An electrician living in a village or small town must be an all-round man and know all the tricks of the trade. Secondly, most of those preparing themselves for the new occupations have to start from scratch. They are not conditioned for work of a technological kind. They have to learn about motors and wiring what American children know in their early teens. It will be remembered that the mechanization of agriculture in Soviet Russia suffered more than one setback in its early stages, because the new 'technicians' simply did not have the 'feel' for the tractors and other mechanical implements they were supposed to master.

The educational tasks to be performed in this connexion are of such scope and importance that they obviously cannot be met within the primitive workshops of the traditional trades or within the primary schools. The system of secondary education has to branch out in new directions. It will continue to prepare for college and university, but at the same time, and in different schools of secondary grade, vocational courses must be developed. This need is so obvious that it is surprising that institutional inertia and lack of foresight have in many countries resulted in neglect of secondary technical education. This neglect has brought dire consequences to the countries concerned and, as has already been pointed out, has powerfully contributed to the overcrowding of the universities. Foreign technicians have had to be imported at great cost, while university graduates remained idle. The over-emphasis on the literary course in the system of secondary education leading to the university has been delightfully illustrated in one of the reports from India, which likened the prevailing system of secondary education to 'a bamboo, each joint being an examination and the diameter remaining practically the same size from the root to very near the top. It has no branches and the crowning top

covers a very small area. What is required is a spreading tree with branches going off in as many directions as possible at definite points along the trunk, not all at the top. . . .¹ Fortunately, a realization of this weakness in many contemporary systems of secondary education is gradually penetrating to most of the countries in this category. In Bulgaria, Romania, Poland, and Yugoslavia much has been done in recent years to improve the system of secondary technical education. In France, too, which is not only highly developed industrially but which is one of the most important agricultural countries in Europe, intermediary technical education has been gaining ground. Italy has gone farthest in the building up of a system of secondary technical schools. As has been mentioned before, approximately half of the boys and girls in the secondary schools of Italy receive a technical and vocational training. On leaving the secondary schools their educational career is completed, with the result that the pressure on the universities in Italy is very much less marked than in other countries.

The creation of new technical and trades schools, far from reducing the importance of those secondary schools which prepare for college and university, is likely to profit them. The new schools relieve them to a large extent of the responsibility for those pupils who have no intention of going on to higher forms of education. They remain thus able to concentrate on their major task, which is the cultivation of all those branches of learning which are the essential preparation for entering the university. Provided the methods of selection and guidance can be further perfected they may also expect a body of pupils able to draw the greatest possible benefit from the instruction they are receiving.

The task of secondary education will be different again in the later stages of industrial development and in the 'tertiary' stage, with its advanced division of labour, standardization of industrial processes, and increased leisure. The problem of how to adapt the schools to the 'tertiary' stage in economic and social evolution is both the most important and the most difficult we have to face. It is the most important because a majority of countries are gradually evolving towards that stage. It is the most difficult because no

¹ *Report of the Government of Bengal Unemployment Enquiry Committee*, vol. i, p. 15.

country has fully reached it. Some parts of the United States have probably come nearest to it, both as regards their actual social and economic development and the degree to which they have adapted their schools to it. We are anxious to emphasize this latter point, lest the impression should arise that our critical attitude toward some aspects of contemporary education in America is based on narrow European prejudices. The American system of education is in many respects far ahead of European systems, and shows many signs that it will be the first to become fully adapted to the occupational and cultural needs of a society in its 'tertiary' stage. Most of the problems we have to discuss at this point in an abstract way are the object of much experimentation throughout the United States.

Adjustment becomes imperative under three heads. First, it has been shown that owing to the greater division of labour and the growing standardization in agriculture, industry, and business, large masses of people need adaptability rather than skill. They are not, as in the last stage, expected to be all-round technicians, but they may have to change their jobs frequently. On the other hand there is found to be a growing demand for a substantial minority of highly educated brain-workers, either as technical specialists or in positions of leadership requiring a broad basis of general knowledge. There may also be a reviving need for skilled craftsmen. The schools are therefore saddled with the double task of offering on the one hand an education which will enhance the adaptability of its pupils, and on the other an education for highly specialized careers.

Secondly, more emphasis will have to be placed at that stage on education for consumption and for leisure rather than for work, particularly for those who are not receiving a highly specialized training. We shall not be misunderstood if we say that the keynote of the 'tertiary' stage is leisure rather than work. Much of that leisure is due to unemployment and should more appropriately be called idleness. Yet there is no doubt that the majority of those who are gainfully employed are also spending less time in work than they were twenty or thirty years ago. There is every indication that hours will be still further shortened in order to make possible the re-employment of those who are without work. Such measures as the lowering of the retiring age work in the same direction: the time for leisure is growing and it is being more

evenly distributed.¹ More important for our purpose is the conclusion that if leisure is not to be simply idleness—irrespective of whether a person is employed or not—education will have to teach ways of using it. This is all the more essential since, with the growing importance of the machine, work is becoming less interesting for an increasing number of people. They are tied to machines which offer them no means of self-expression. This point has been clearly put by Professor Max Handman in a memorandum to the American Council on Education:

'The new era has a much wider variety of occupations, but the skills required in most of them are limited and the greater variety is in reality a variety of a very small marginal difference between occupations. It follows from this that freedom and self-expression in so far as they seek an outlet in what the person does, in his occupation, find therein an exceedingly limited field of play. This forces the individual to look for the activities outside of his occupation in order to obtain that freedom and self-expression which he craves. The values of life are now to be found in what the person does with his income and with his leisure and not with his endowments and equipment, and any training or preparation for living in the modern age which leaves out training for consumption and for leisure is missing the central objects of a modern person's life.'²

Thirdly, life in the super-industrial state, while for large masses simpler as regards the skills demanded of them by their work, is infinitely more complex in practically every other respect. It is the age of super-organization in private business and in the affairs of government. A knowledge of fundamentals of all the social sciences is necessary to enable the individual citizen intelligently to exercise his political rights. New forms of social organization

¹ We are, of course, perfectly aware that there are limits to the attempt to fight unemployment simply by a redistribution of leisure-time or rather of the 'available volume of work'. The idea that there is a determined volume of work in any given society is obviously childish. Technological progress does not only take work from man but creates vast opportunities for new work, particularly, as has been pointed out, in the field of the higher service occupations and the professions. The development of the last twenty years nevertheless seems to indicate that new industries, new occupations, and new professions are not able to absorb quickly enough all those who have been displaced by the machine. It is therefore to be anticipated that the movement for shortening hours will continue to gain in momentum.

² Dr. Max Handman, *Occupational Opportunities in our Economic System*, Memorandum no. 6 (mimeographed), submitted to the Committee on Occupational Training and Adaptation, American Council on Education, Washington, 1932.

become necessary. The individual more than ever before becomes dependent upon the well-being of the community as a whole and has to orientate his own action to the interests of that community. The rugged individualism of pioneer days, a highly constructive force in its time, is found wanting. Collective action for social security gains ground. As new demands arise for goods and services hitherto reserved for the few, attempts are made to bring them within the financial reach of the many. Co-operatives, medical insurance, and similar schemes are hotly discussed. In one word, the task of the school in preparing the younger generation for life in a new world grows both more difficult and more important. New knowledge has to be acquired and new social concepts have to be explored.

What does all this mean in terms of educational programmes on the secondary level? Above all it means, as has been suggested before, a greater differentiation in the types of education offered. At what age that differentiation should begin is a matter to be decided in the light of concrete national situations. The later it begins the better; it cannot, however, be evaded. It is not possible to prepare in the same classes the multitude of those who will earn their living in a factory, in tilling the soil, or as clerks in offices, and also those whose special aptitudes mark them for a career in the professions or as highly skilled craftsmen. To attempt this means doing justice to no one.

Broadly speaking, it will need at least three different types of educational programme to do justice to the aptitudes of the pupils and to meet the needs of society. One type will be designed to prepare primarily for college and university. The schools which carry it will come nearest to the classical idea of secondary education that still prevails in most of the countries of Europe. Having one major task, dealing with students of superior ability, they are able to do more thorough work in a shorter time. For example, in America such schools could probably accomplish much of what to-day can only be completed during the first two years in college.

A second type of school will be necessary to educate highly trained artisans and technicians. These schools will provide for all who, being of a predominantly practical or artistic turn of mind, are preparing themselves for the limited number of occupations which require both creative individual effort and skills difficult to acquire even in a highly mechanical society. They will train

draughtsmen and designers, high-class carpenters and interior decorators, watchmakers, &c. Some of these schools will find a prolongation on the higher educational level in technical colleges and the like.

While the first two types of school are in many respects inspired by traditional educational concepts, the third cannot lean on precedent, though there are definite indications that America is moving towards it. As we see it, schools of this type will be at the very centre of secondary education in the super-industrialist state. They will have to serve the millions in search of education who for intellectual or other reasons are not likely to go beyond the secondary grade, those who need adaptability rather than skills, an education broad enough to fit them not only for work but for an intelligent and creative use of their leisure-time, a training enabling them to be active members of an enlightened citizenry.

As we visualize these tasks it becomes obvious that what is needed is a new type of general education, the kind of 'mind-training' of which Frank D. Jewett spoke when he objected to over-emphasis on detail techniques, too much diversity in attempting to teach all kinds of skills—'business itself is quite competent to provide the details of training in the technique of its operations' (see p. 320). In a sense it means a return to the more formal disciplines such as mathematics, the fundamentals of science, and the humanities. Yet the curricula would cover a wider ground. Much time would be devoted to a study of the economic and other forces moulding contemporary society. The fine arts would not be neglected. Being freed from the teaching of all kinds of unrelated skills—the curse of many a high school in the United States—and from the responsibility of putting a select group of students through the strict discipline required by a pre-university training, these schools would have every latitude in searching for the best ways of developing their students as all-round personalities, fit to live in a modern society.

This emphasis on general education need not prevent them from giving their training a vocational bias, not in terms of definite technique but by way of conditioning their pupils for certain occupational groups. Thus secondary or high schools located in industrial areas would enable their students to spend much time in workshops, not in order to become expert turners or founders but in order to get used to working with mechanical tools, to get the

'feel' of the machine. Or schools in agricultural districts would include courses in soil chemistry, in agricultural marketing, &c.

Education as here envisaged would in no sense be 'second-rate', fit only for the 'left-overs' who are too stupid to proceed to institutions of higher learning. The general courses, if properly adapted to individual gifts, would be likely to lead the pupils considerably beyond the level reached by the average American high-school graduate of to-day. Above all it would probably help to attain the various objectives which are socially desirable in the 'tertiary' stage. The products of such an education ought to be more *adaptable*, since they would not identify themselves with certain specific skills but be conditioned for a wide range of occupations. More important than this: they would be adaptable because in their improved knowledge of the world, and having learnt to think, they would be better able to meet new situations. Allan Fisher has emphasized this point in saying that 'higher educational standards should . . . make us more adaptable to changes in the structure of production'.¹ They would, furthermore, be better prepared to make an *intelligent use of their leisure*.

The schools would thus have counteracted the obsolete notion of a puritan world that man was born for work (drudgery) and that anything you enjoyed doing was immoral self-indulgence. Having been taught an appreciation of the 'finer things' of life—of art, the value of reading, education itself—people would be less at a loss how to spend their leisure and their money.² Finally, their *social*

¹ *Op. cit.*, p. 117.

² This latter function of the schools is relatively unimportant as long as the overwhelming majority of people have to spend all their time or most of it in earning their living, i.e. in meeting the bare necessities of life. When, however, there is more leisure and more money to spend on 'luxuries', the question of how to spend the money which is left after the primitive needs are satisfied grows in importance. The choices to be made can undoubtedly be influenced by the schools, which thus become themselves a means of determining occupational distribution. It is impossible, for instance, to raise general educational levels and to emphasize education for leisure without increasing the demand for teachers, physicians, architects, and other professional people. Education for leisure means nothing less than creating a desire in the students to spend their leisure-time as creatively and profitably as possible. They may, for example, want to spend it in acquiring more education (adult education), which would increase the demand for teachers; in attending artistic performances, which would increase the demand for artists and musicians; in reading books, which would create a demand, perhaps for more writers, certainly for more librarians. To turn leisure to right use implies, further, that leisure-time should be spent in the best possible surroundings, which will mean better housing, increasing in

concepts ought to have become deepened and clarified. There should be meaning for them in the great and small political events, in the economic developments of their own country and of the world, towards which they should be able to take an intelligent attitude. They should be removed several steps from the present situation in most of the western countries, where matters political and economic are largely discussed in terms of political slogans rather than in the light of concrete knowledge and understanding.

It may be confidently expected that a system of secondary education conceived on these or similar lines would do much to relieve the pressure on the institutions of higher learning. The educational objectives being clearly defined for each of the several types of schools, parents, teachers, and pupils would not be tempted as much as they frequently are at the present time to run in different directions all at the same time. On completing secondary school boys and girls would be ready to proceed to college if they had gone through the first type of secondary school, to enter one of the highly specialized occupations if they had passed through one of the technical or craft schools, or, if they had attended our third type, they would have reached a degree of adaptability which would make it easier for them to secure remunerative work in one of the many occupations which require comparatively little skill, easily acquired through a short period of apprenticeship. There ought to be fewer who *faute de mieux* become poor college students. Furthermore, the institutions of higher learning ought to be relieved of a great many of those who go to college because the secondary schools have not given them the kind of general education they feel in need of or which will assure them of a certain standing and influence in society. If these objectives can be met by the secondary schools, the college and university ought to lose some of their glamour. It is after all not the college diploma which counts, but the fact that the diploma certifies that the holder has attained a certain educational level, that he is an educated person. If, through an emphasis on general education in the secondary schools, higher educational standards can be attained by the majority of people, it is probable that the

turn, at least for some time to come, the demand for highly trained architects and town-planners. These examples could easily be multiplied. The net result is that education for leisure means above all more work for the professional man—an important result to register in a study on the unemployment in the professions.

difference in the social standing of the college or university graduate on the one hand and of the graduate of a secondary school on the other will diminish substantially.¹ It is, finally, safe to assume that such a system as the one we are discussing will tend to reduce differences in wage-levels and thus help to satisfy the desire of the masses for material improvement. Not only will it result in a better occupational distribution, which, as has been shown, tends to reduce the difference in wage-levels, but it is certain that in a country where the masses are highly educated ways and means will be found to arrive at a better social organization, and with it a better distribution of the national income. Exploitation will only be rampant where the masses lack education or are poorly educated. This is an important point, in so far as the difference between the income of college graduates and that of people without a higher education is at present such as to constitute a powerful incentive for seeking a higher education at all costs.

Much of what has been said in the last few pages may sound like educational day-dreaming. There is always a danger of being carried away by one's imagination, a danger both for the writer and for the reader. It ought to be emphasized again, therefore, at this point that we are not attempting to put forward an 'ideal plan'. Nor do we suggest that all high-school graduates educated under the kind of programme we have outlined are at any time likely to be perfect products of a perfect system. All we are suggesting are

¹ Better education for the under-privileged and the sons and daughters of the middle and lower middle classes is not likely to overcome by itself the notion that the college or university graduate is bound to be the better man and therefore held in higher social honour. Amongst the other measures designed to bridge the gulf between the graduate and non-graduate two need mentioning at this stage: first, better and less class-conscious systems of selecting students for the institutions of higher learning. Selection ought to be made on the basis of aptitudes only, and not be influenced by the station of pupils' parents. This would exclude a good many 'well-born' boys and girls from the institutions of higher learning, while the number of students from the less privileged classes of society would increase. It would not do away with the special position the college or university graduate holds in society, but that position would be based on merit; it would not be felt as a social injustice as it is at present. Secondly, all those efforts should be encouraged, such as work-camps, which bring the college student into closer contact with the group of manual workers—often the down-and-outs—which give them a better understanding of the problems of the working classes and teach them the dignity of manual labour. Gradually such efforts will lead to a revaluation of our existing scale of social values, which is obviously deficient. The day may come when the world will begin to think in terms not of an intellectual *élite* alone but of the several *élites*, when it will appreciate excellence wherever it is met with.

some of the directions in which educational programmes might be suitably developed in order to adjust secondary schools more nearly to the exigencies of a new age.

(c) *Higher education*

As society enters upon new stages of development the institutions of higher learning, like the primary schools, are less subject to change than secondary schools. The universities particularly and technical colleges will always have the task of furthering research and professional training. A physician, an electrical engineer, or a natural scientist will require that specialized knowledge in their own fields which is the same for all countries. University education will therefore only require adaptation in so far as changes in the social and economic scene lead to a demand for new types of professional workers or necessitate a new outlook on social and economic problems on the part of the established professions. Only the liberal arts colleges are likely to be confronted with essentially new tasks in the 'tertiary' stage.

The position of the institutions of higher learning in primitive countries need not concern us. In many cases they have no universities of their own, not at least in the proper sense of the word.¹ In so far as they feel a need for people trained in scientific techniques they import foreigners or have some of their own people trained in foreign institutions. Such are Albania, Iraq, or Iran. As countries of this type develop 'universities' of their own, they usually begin with a few faculties, chiefly law and medicine. The danger to be guarded against is that these universities, often being the pride of the country, may be developed too rapidly at the cost of secondary and above all primary education. Where such is the case the graduates of these universities may find that the people whom they are supposed to serve do not feel a need for their services, and are still less ready or able to pay for them. The sounder procedure would be to give more attention to begin with to the education of an adequate number of teachers.

In the secondary stage of society, and during the evolution leading up to it, the system of higher education shows greater differentiation. As the range of occupations widens which require

¹ For the purposes of our study there is obviously no need to discuss the institutions of higher religious learning which existed in such countries as Turkey, Egypt, India, &c., long before an attempt was made to create universities on modern lines.

workers educated in scientific techniques, new institutions such as technical colleges (engineering, agriculture, veterinary science, &c.) come into existence. Alongside them, or preparatory to the universities, liberal arts colleges may function to provide an education on general lines. Any generalization at this point is impossible. In some cases the liberal arts colleges do little more than complete the tasks accomplished in other countries by secondary schools. Or they may advance the cause of general learning and education beyond the point reached in those countries where students proceed directly from the secondary school to specialized courses in the universities and technical colleges. Some of the difficulties besetting the institutions of higher learning have been set forth in detail. They may be 'overcrowded' in the sense that they have to admit too many poorly qualified students, or they may be producing too many highly specialized graduates for the limited demand that exists. It has furthermore been shown that the institutions of higher learning can do little to remedy the situation. We shall not retrace our steps to emphasize that the solution, so far as there can be a solution, lies in better occupational planning, on which to base more adequate educational planning in the secondary schools.

The three traditional types of institutions of higher learning are fully capable of meeting the needs of society in its 'tertiary' stage. In other words, no changes in the structure of the system of higher education in a country like the United States seem to be indicated. Each of the three types of schools has its definite purpose: the liberal arts college with its emphasis on the humanities in the broadest sense of the word; the university with its emphasis on independent research and professional training; and finally, the higher institutions or colleges for technical education. Yet there should be certain changes in emphasis which would affect above all the liberal arts college. It is to be hoped that the point may be reached where they will receive their students largely from secondary schools preparing their pupils primarily for higher education. In addition the college might admit a selected group of graduates from the other types of secondary schools, who will not be quite as far advanced in their general education but will bring with them a rather intimate knowledge of matters agricultural, industrial, commercial, &c. With such a student body the college ought to be able to attain two educational objectives, one

of which is at present hardly attained anywhere. In the first place it will be able to prepare its students within a period of two years for graduate work in a university. Valuable time will thus be saved. Infinitely more important, however, will be the other task of the college: in a four-year course it will have to train the leaders in business and public life. There will at last be a place in which young people will be able to receive the kind of general education of the highest type which, if they have the necessary ability, will make them real leaders of men. There will be little specialization but all the more synthesis. 'All-round' personalities will be created, not people who know everything, not experts in some small field, but persons who have learnt to think synthetically, who will understand the fundamental forces in modern life. If this end can be attained no college graduate need be afraid of unemployment. And the world will have the type of workers which, in spite of all the overcrowding in the professions, it lacks so sorely at present.

The universities would receive their students from the colleges, or in exceptional cases, where there are graduates of the schools preparing for college and university who are sufficiently far advanced, directly from the schools. The students of the higher technical institutes would come from the technical high schools or from amongst the best-qualified graduates of other types of secondary schools or the college. The fact that we are only attempting to trace possible lines of development and that such questions of admission are obviously contingent upon local circumstance can relieve us of the necessity of being more specific.

Under such a system it is hardly likely that the universities and technical colleges will be badly overcrowded, i.e. that their supply of graduates will greatly exceed the demand. The new opportunities offered by the various types of secondary schools and still more the great new opportunities offered by the colleges—there will hardly ever be enough people attempting to acquire the highest attainable form of an all-round education—ought to reduce considerably the number of students who want to enter purely professional courses. If, contrary to all expectations and for reasons difficult to foresee, there should at any time be a substantial surplus of candidates for the professions, certain restrictions on enrolment in professional courses might be temporarily imposed. They will be all the easier to bear as the four-year college course will offer an alternative worthy of the best brains.

EPILOGUE

THE problem of the unemployment of college and university graduates is a real one. It is so real that even a world harassed by wars and revolutions is beginning to pay attention to it. Ample evidence has been given that here, there and everywhere measures have been taken or are contemplated to rescue the tens of thousands of young men and women, graduates of the institutions of higher learning, who are without work. Some of these measures are of more than ephemeral value. They promise a better organization of the market for intellectual labour, a better distribution of available work. A few go farther and plan for the future. Planning agencies have come into existence whose work will undoubtedly help young people in the choice of their career. Employment exchanges are attempting to provide the right kind of work for the right kind of man. They are exploring the field for new opportunities for intellectual workers.

All this is encouraging. Yet one cannot help feeling that the world is still far from a realization of the full magnitude of the problem which faces it. Not only the fate of individuals but that of society itself is at stake. There are still too many who believe that the present difficulties will pass, that given time matters will right themselves, that with a return to prosperity there will be work for every one and above all for the graduates of college and university. This hope, alas, is not well founded. The masses have tasted of the fruit of the tree of knowledge. To partake of it further has for them become the means to social and economic emancipation. They will not rest, they will slave and push to give their children the advantages, real and imaginary, which more and better education promises. Unless new outlets can be created for their cravings for social and economic advancement they will continue to flood the institutions of higher learning with ever-growing masses of students. Or, if they are balked in their efforts, they will revolt.

Germany has chosen one way out. She has replaced the *image* of the educated man by that of the warrior. In creating a new ideal of man she has at least temporarily succeeded in diverting the attention of the masses from education to other supposed roads to emancipation. Stringent and ruthless educational restrictions have

done the rest. There is greatness in the attempt, but it is an attempt which in our opinion leads to ultimate disaster. For those who take the sword will perish by it—even though they may be victorious.

An attempt has been made in this study to show another way. Far from restricting educational facilities it has been proposed to extend them. Every one according to his abilities is to be enabled to grow in learning and understanding. General education is not to be the privilege of the few but the pride and the solace of the many. A common basis for social life is to be found not on the lowest but on the highest educational level to be attained in any given society. Where a more equal social standing is achieved through a common share in the higher forms of learning, vocational differences will become less important. It will not be as important as at present whether one is working in a lawyer's office or in a factory. At the same time it will become easier to direct the young towards those occupations which are in need of additional workers. Careful occupational and educational planning will bring about a better occupational distribution, which will result in more equal earnings in the various occupational groups. Substantial differences in earnings are likely to persist; but they will not threaten the peaceful evolution of society, because with growing education there is bound to come growing appreciation of quality rather than quantity.

Education, however well conceived and planned, will not usher in the millennium. Perfection is not of this world. Education can do this, however: having found its own bearings it can point the way to a happier and fuller life in a world which threatens to lose all sense of value and direction.

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